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## TYPHUS FEVER

### THE RAT FLEA, *XENOPSYLLA CHEOPIS*, IN EXPERIMENTAL TRANSMISSION

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Epidemiological studies have shown an association of typhus fever in the Southeastern United States with the handling of foodstuffs (1) and intimate association with rats (2).

The importance of the rat flea as a vector of endemic typhus fever in the United States has been shown by the recovery of the virus of this disease from fleas taken from wild rats trapped at typhus fever foci in Baltimore (3). More recently the virus of endemic typhus has also been recovered from fleas taken at a typhus focus in Savannah (4). The Baltimore and Savannah strains of virus have been definitely shown to be identical with the virus of endemic typhus recovered from a human case (4). The recovery of typhus virus from wild rats recently has been reported by Mooser, Castaneda, and Zinsser (5).

Experimental transmission of endemic typhus in the laboratory by means of the rat flea has been attempted. In these experiments one of the species of flea (*Xenopsylla cheopis*) incriminated by our previous work has been used (3).

Metal and glass boxes approximately 24 inches long, 14 inches wide, and 18 inches deep were constructed. The bottoms and corners were made of copper, the sides and ends being of glass. Tops were made of fine copper wire screening stretched over metal frames. A trap door was placed in each top.

White rats were chosen as the experimental animals.

Fleas were procured from rats trapped in Baltimore and identified by hand lens. Approximately 50 of these fleas were placed in glass box X-1. White rats were injected with endemic typhus virus (Baltimore and Savannah flea strains) and placed in the same glass box. Approximately two weeks after the first infected white rat had been placed in box X-1, six fleas were removed from this box, emulsified in normal saline, and injected into two guinea pigs. One of these guinea pigs developed clinical endemic typhus. This strain of virus was carried in guinea pigs and rabbits for three generations and then dropped. Smears from the tunica of one of the guinea pigs showed rickettsia. Two rabbits inoculated with this virus showed the development of agglutinins for *Proteus* X<sub>19</sub>, type O.

Noninfected white rats and additional infected white rats were then placed in box X-1. After a residence of about two weeks in the box one of the white rats originally noninfected was removed and killed. Six fleas were removed from this rat, emulsified in normal saline, and injected into two guinea pigs. Both animals developed clinical endemic typhus. Two rabbits inoculated with the strain of virus obtained from these fleas developed agglutinins for *Proteus* X<sub>19</sub>, type O.

The brain and spleen from this originally noninfected white rat were removed and inoculated, separately, into guinea pigs. These animals developed clinical endemic typhus. Two rabbits inoculated with the strain of virus recovered from this rat developed agglutinins for *Proteus* X<sub>19</sub>, type O.

The fleas remaining in box X-1 were then transferred to a fresh box, X-3. White rats infected with typhus and noninfected white rats were placed in box X-3. About two weeks later one of the white rats, originally noninfected, was removed and killed. Fleas taken from this rat were treated as before, with the same results. The brain and spleen of this rat were injected into guinea pigs, and clinical endemic typhus again followed. This strain also produced agglutinins for *Proteus* X<sub>19</sub>, type O, in rabbits.

The same experiment was again repeated, using a second originally noninfected rat from box X-3. This again resulted in establishing a strain of virus, in guinea pigs, clinically identical with endemic typhus.

Guinea pigs recovered from infection with an established strain of endemic typhus virus originally derived from a human case, and also guinea pigs recovered from infection with endemic typhus virus isolated from rat fleas caught at typhus foci have been found immune to subsequent inoculation with the strains of virus recovered from the emulsified fleas removed from boxes X-1 and X-3, and likewise to the strains recovered from brains and spleens of originally noninfected rats from the same boxes.

Careful repeated search of both boxes and rats failed to show the presence of any blood-sucking parasite other than *Xenopsylla cheopis*.

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# CURRENT PREVALENCE OF COMMUNICABLE DISEASES IN THE UNITED STATES <sup>1</sup>

June 21-July 18, 1931

The prevalence of certain important communicable diseases, as indicated by weekly telegraphic reports from State health departments to the Public Health Service, is summarized in this report. The underlying statistical data are published weekly in the Public Health Reports under the section entitled "Prevalence of Disease."

*Poliomyelitis.*—During the period of this report the number of cases of poliomyelitis reported (491) was more than twice the number reported for the preceding 4-week period. The States along the Atlantic coast and the East North Central group seemed to be mostly responsible for the excess incidence. In Massachusetts the cases rose from 8 to 32; in New York from 16 to 105; in Connecticut from 1 to 16 and in North Carolina from 2 to 9. Each of the States in the East North Central group, except Indiana, reported from three to five times more cases than were recorded during the preceding 4-week period.

Part but not all of this increase represents the usual seasonal rise. The total number of cases reported was about 52 per cent of the number reported in the same period of 1930 but was more than twice the number reported for the corresponding period of either 1929 or 1928. The following table affords a comparison by geographic areas with the reports for 1930 and 1929.

TABLE 1.—*Poliomyelitis cases reported in various geographic regions by 4-week periods in 1931 with comparative figures for the same periods in 1929 and 1930*

| Geographic division              | Four-week period ended— |         |        |         |
|----------------------------------|-------------------------|---------|--------|---------|
|                                  | July 18                 | June 20 | May 23 | Apr. 25 |
| All regions:                     |                         |         |        |         |
| 1931.....                        | 291                     | 124     | 87     | 83      |
| 1930.....                        | 611                     | 189     | 93     | 63      |
| 1929.....                        | 132                     | 65      | 102    | 66      |
| New England and Middle Atlantic: |                         |         |        |         |
| 1931.....                        | 169                     | 30      | 23     | 23      |
| 1930.....                        | 37                      | 12      | 24     | 15      |
| 1929.....                        | 33                      | 23      | 24     | 16      |
| South Atlantic:                  |                         |         |        |         |
| 1931.....                        | 23                      | 14      | 10     | 9       |
| 1930.....                        | 30                      | 20      | 9      | 13      |
| 1929.....                        | 39                      | 18      | 23     | 14      |
| East North Central:              |                         |         |        |         |
| 1931.....                        | 41                      | 15      | 14     | 14      |
| 1930.....                        | 40                      | 15      | 7      | 4       |
| 1929.....                        | 11                      | 16      | 23     | 19      |
| South Central:                   |                         |         |        |         |
| 1931.....                        | 24                      | 20      | 14     | 8       |
| 1930.....                        | 137                     | 36      | 12     | 18      |
| 1929.....                        | 20                      | 7       | 12     | 5       |
| West North Central:              |                         |         |        |         |
| 1931.....                        | 12                      | 15      | 10     | 9       |
| 1930.....                        | 33                      | 6       | 2      | 0       |
| 1929.....                        | 7                       | 12      | 7      | 6       |
| Mountain and Pacific:            |                         |         |        |         |
| 1931.....                        | 22                      | 30      | 16     | 20      |
| 1930.....                        | 334                     | 100     | 39     | 13      |
| 1929.....                        | 22                      | 19      | 13     | 6       |

<sup>1</sup> From the Office of Statistical Investigations, U. S. Public Health Service. The number of States included for the various diseases are as follows: Typhoid fever, 47; poliomyelitis, 48; meningococcus meningitis, 48; smallpox, 45; diphtheria, 47; scarlet fever, 47; influenza, 39 States and New York City. The District of Columbia is counted as a State in these reports.

In 1930 the far West and the Mississippi Valley were the areas chiefly affected. This year the first tendency toward any appreciable increase has appeared in States along the Atlantic coast and the East North Central group, with very little rise in the Western States and Mississippi Valley.

*Typhoid fever.*—The number of cases of typhoid fever reported for the current period was twice that recorded during the preceding 4-week period. Comparison with previous years shows that the disease was more prevalent than in the corresponding period of either of the two preceding years. The cases totaled 2,303, as compared with 2,092 in 1930 and 2,047 in 1929, i. e., approximately 10 per cent increase in 1931 over each of the two preceding years.

Each geographic area except the Mountain and Pacific groups contributed to the increase. The West North Central group showed an increase of about 42 per cent over last year's figure, and in the other groups the increases ranged from 6 per cent to 17 per cent. The Mountain and Pacific groups recorded a 10 per cent decrease.

*Measles.*—The number of cases of measles (26,081) reported for the four weeks ended July 18 was only 84 per cent of the number reported for the same period in 1930. It was, however, 10 per cent in excess of the number occurring in 1929.

For the first time this year the incidence of measles in the North Atlantic States fell below the incidence of last year during successive 4-week periods. The decrease (8 per cent) was small, however, compared with the decreases of from 40 to 70 per cent which occurred in other areas. The only exceptions to the decline were the South Atlantic and East North Central groups. In the former group the number of cases was four and five-tenths times that of last year and in the latter the excess was about 40 per cent.

*Smallpox.*—The incidence of smallpox reached its lowest level for the current year during the 4-week period ended July 18. The number of cases reported was 1,675, which was only 54 per cent of the cases reported for the corresponding period in 1930 and 71 per cent of the figure for 1929. All regions participated in the decline except the New England and Middle Atlantic groups. In Vermont the cases rose from 23 for the preceding 4-week period to 56 during the current period and in New York from 28 to 83 cases. The decreases in the other groups ranged from 24 per cent to 77 per cent.

*Scarlet fever.*—The number of cases of scarlet fever (6,727) reported during the 4-week period ended July 18 was only 50 per cent of the number reported during the preceding 4-week period. In relation to previous years the incidence was about 12 per cent higher than in the corresponding period of 1930, but was 2 per cent below that of 1929. Sections along the Atlantic coast reported increases over last year. The North Atlantic showing a 45 per cent increase and



the South Atlantic a 12 per cent increase. Most of the other sections showed very considerable decreases.

*Meningococcus meningitis*.—For the current period there were 244 cases of meningococcus meningitis reported, which was about 30 per cent lower than the figure for the corresponding period of 1930 and 60 per cent below 1929. All areas contributed to the decline. In the South Atlantic States, the only group which has shown any increase during the current year, the cases dropped to 25 per cent of last year's figure. The sharpest decreases were apparent in the South Central (51 per cent) and the Mountain and Pacific groups (62 per cent).

*Diphtheria*.—The comparison with previous years continued very favorable. The number of cases reported was 2,459, as compared with 3,062 for the corresponding period of last year and 4,430 in 1929 for the corresponding period. From 20 to 35 per cent decreases occurred in the North Atlantic States and the regions around the Great Lakes. In the other groups the figures approximated those of last year for the same period.

*Influenza*.—For the first time in the current year the incidence of influenza fell below that of the corresponding period of last year. The cases totaled 765, as compared with 856 for the corresponding periods of each of the years 1930 and 1929. With the exception of the East North Central group of States, all of the geographic areas were as low as last year's figure or showed decreases ranging from 21 to 26 per cent.

*Mortality, all causes*.—The mortality rate for all causes in a group of large cities as reported by the Bureau of the Census, averaged 11.2 per 1,000 for the 4-week period ended July 18, 1931. Last year the average rate for this period was 10.8. The average rate for this period during the four preceding years was 11.4.

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## COORDINATION IN THE SANITARY CONTROL OF BOTTLED MINERAL WATERS<sup>1</sup>

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Over 400 springs or wells in the United States have been commercialized, the water from these sources being bottled and sold for medicinal and table use. Owing to improvements in the quality of municipal water supplies, high freight rates, and a changed attitude on the part of the medical profession toward the efficacy of mineral waters in the treatment of disease, only a small proportion

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<sup>1</sup> Presented at the Twenty-ninth Annual Conference of State and Territorial Health Officers with the United States Public Health Service, Washington, D. C., Apr. 30, 1931.

of these 400 springs and wells are active at the present time. Nevertheless, considering the country as a whole, there is a substantial traffic in bottled waters. The traffic in these commodities at the present time is both local and interstate. There are several dozen well-known springs, such as Poland, Mountain Valley, Buffalo, Pluto, etc., from which bottled water is shipped in relatively large quantities to all parts of the United States. There are numerous other springs or wells, however, from which water is shipped only intermittently, chiefly in intrastate traffic, but also sporadically in interstate commerce.

The regulatory control of these bottled waters from the standpoint of their sanitary quality and from the standpoint of the therapeutic claims made for them in the labeling of the interstate package, is vested in the Food and Drug Administration of the United States Department of Agriculture under the general provisions of the Federal food and drugs act. Ever since the act became effective in January, 1907, a portion of the funds and time of the personnel of the Administration has been expended in bringing these products into compliance with the terms of the law.

The elimination of the names of diseases from the labeling of bottled waters through numerous court actions brought under the provisions of the act, will not be referred to here. The phase of the regulatory control which it is desired to bring before you at this time is that governing the sanitary quality of these bottled waters.

The current procedure in the Food and Drug Administration is to purchase from dealers and handlers of bottled waters and from consumers of these products, adequate samples for bacteriological and sanitary chemical analyses. Several hundred such samples are examined annually in our Water and Beverage Laboratory under the direction of Mr. J. W. Sale. Only a small proportion, about 10 or 15 per cent, of these samples is found to be polluted. Additional samples of the waters found to be polluted are collected and examined, and formal action leading to confiscation of polluted shipments and prosecution of the shipper is instituted under the act. The standards which we employ in determining whether or not a water is polluted are essentially the same as those used by the United States Public Health Service in the control of water on interstate carriers. The exact standards that we use and other details of our procedure are fully described in a mimeographed article entitled, "Mineral Waters and Their Salts Under the Federal Food and Drugs Act." The laboratory examination of the samples is supplemented, wherever possible, by inspection of the sources of the supplies; but we have not found it practicable to make as many surveys on as many occasions as would be required to bring about thoroughly acceptable conditions. We are somewhat handicapped in that we have no

sanitary engineers on our staff, which consists of chemists, bacteriologists, microscopists, pharmacologists, medical officers, inspectors, etc.

It has occurred to some of us that a closer coordination between the administration and State health officials who are charged with the sanitary control of public water supplies might prove to be extremely beneficial to all parties concerned. As already stated, the water from many springs and wells is sold and consumed largely within the State in which the sources of supplies are located and is distributed only intermittently in interstate commerce. Under these circumstances the chief responsibility for the sanitary quality of this class of bottled waters rests primarily upon local health authorities. While we have made close contact with the State health officials of a few States, generally speaking we are not informed of the steps which these officials have taken to control the sanitary quality of bottled waters, and presumably the State health officials have not been aware, except perhaps in a very general way, of the control that has been exercised under the provisions of the food and drugs act. It was our thought that if our work could be coordinated more closely, considerable duplication of work would be avoided, with a consequent saving in funds.

With this thought in mind, the writer and Mr. Sale, accompanied by a representative from the United States Public Health Service, visited the State Health Departments of North and South Carolina and Florida. Arrangements were made with the officials of these States for an interchange of information through the medium of the administration's field stations, which are located at strategic points throughout the United States. Specifically, it would be advantageous if this administration should be informed as to what measures have been taken by the State departments in the sanitary control of these springs and wells, particularly with respect to the sanitary inspection and the source of supplies, the conclusions reached by the engineers who have made the inspections, the reports of laboratory analyses, and the recommendations for improvement. It was agreed that this administration would report in detail conditions which we have found as a result of our various inspections and analyses of the waters which have entered interstate commerce, and that we would be prepared, chiefly through the agents of our field stations, to cooperate at all times with the health departments for the purpose of securing bottled waters of high sanitary quality and eliminating so far as possible from the channels of commerce any such waters as may prove a possible menace to health.

If this plan of cooperation appeals in general to other State health officials, it is planned that members of the administration will personally visit every State department which is charged with the sanitary control of mineral springs and that these contacts will be made

as soon as opportunity offers. We shall continue to exercise supervision over the labeling of these bottled waters under that section of the act which interdicts the use of therapeutic claims which are false and fraudulent. We are confident that if such mutual arrangements can be effected, the result will be advantageous to health officials as well as to members of the administration in their common aim—the protection of the consuming public.

The writer is indebted to Mr. J. W. Sale for his assistance in the preparation of this paper.

### COURT DECISION RELATING TO PUBLIC HEALTH

*Disease developing gradually held not compensable under workmen's compensation act.*—(Tennessee Supreme Court; *Morrison v. Tennessee Consol. Coal Co.*, 39 S. W. (2d) 272; decided June 10, 1931.) An action was brought against a coal company by an employee of said company to recover damages for personal injuries. The plaintiff's allegations were to the effect that, because of unsuitable tools furnished him and because of improper ventilation of the mine, he had been compelled to breathe large quantities of dust, fumes, and gases, and that, as a result of such inhalation, tuberculosis or other serious infection of his respiratory organs had gradually developed. One of the defenses interposed was that the injury sued on was compensable under the workmen's compensation law, and the question presented to the supreme court on appeal was whether such injury was so compensable.

The compensation statute provided:

"Injury" and "personal injury" shall mean only injury by accident arising out of and in the course of employment, and shall not include a disease in any form except as it shall naturally result from the injury.

The supreme court stated that "If the plaintiff suffers from a disease at all, occupational or otherwise, he has no recourse under the workmen's compensation act, unless that disease naturally results from an accidental injury," and, citing former decisions by it, declared.

An injury, to be regarded as an accidental injury under the compensation act, must be an injury unforeseen, unexpected, and fortuitous. An element of unexpected casualty must be present.

Proceeding the court said:

According to the declaration herein, the disease of the plaintiff came about as a natural result of the inhalation of dust, gases, and fumes present in the mine. Certainly then there is no unforeseen, unexpected, nor fortuitous result involved.

Moreover, we are unable to see anything unforeseen, unexpected, or fortuitous in the cause of plaintiff's injuries, as that cause is stated in the declaration. \* \* \* No element of casualty appears about the selection of the tools or the preparation of the working place, nor does any element of casualty appear in the operation of such tools by plaintiff, nor in the pursuit of his activities by plaintiff in the particular working place. \* \* \*



The court also pointed out that, in addition to the foregoing, it was quite generally held that, in order for a disease to be referable to an accidental injury under compensation statutes, the inception of the disease must be assignable to a determinate or single occurrence identified in space or time. It cited one of its own decisions in which the last proposition was recognized, and then went on to say:

If an accidental injury was viewed otherwise, it would be difficult to apply the statutory provision as to notice and indeed difficult to apply the limitation of the time in which an action under the compensation statute must be commenced. Such provisions of the statute indicate that the legislature could not have intended accidental injuries to include diseases which developed "gradually" or "by gradual process," as the plaintiff's troubles herein are alleged to have evolved.

### DEATHS DURING WEEK ENDED JULY 18, 1931

*Summary of information received by telegraph from industrial insurance companies for the week ended July 18, 1931, and corresponding week of 1930. (From the Weekly Health Index, issued by the Bureau of the Census, Department of Commerce)*

|   | Week ended<br>July 18, 1931 | Corresponding<br>week, 1930 |
|---|-----------------------------|-----------------------------|
| Policies in force.....                                  | 75, 038, 874                | 76, 031, 789                |
| Number of death claims.....                             | 12, 549                     | 12, 065                     |
| Death claims per 1,000 policies in force, annual rate.. | 8. 7                        | 8. 3                        |

*Deaths<sup>1</sup> from all causes in certain large cities of the United States during the week ended July 18, 1931, infant mortality, annual death rate, and comparison with corresponding week of 1930. (From the Weekly Health Index, issued by the Bureau of the Census, Department of Commerce)*

[The rates published in this summary are based upon mid-year population estimates derived from the 1930 census]

| City                         | Week ended July 18, 1931 |                            |                           |   | Corresponding<br>week, 1930 |                           | Death rate <sup>2</sup> for<br>the first 29<br>weeks |                  |
|------------------------------|--------------------------|----------------------------|---------------------------|---|-----------------------------|---------------------------|--|------------------|
|                              | Total<br>deaths          | Death<br>rate <sup>2</sup> | Deaths<br>under<br>1 year | Infant<br>mor-<br>tality<br>rate <sup>3</sup> | Death<br>rate <sup>2</sup>  | Deaths<br>under<br>1 year | 1931   | 1930             |
| Total (81 cities).....       | 7, 025                   | 10. 3                      | 598                       | 4 47  | 11. 0                       | 668                       | 12. 8  | 12. 6            |
| Akron.....                   | 26                       | 8. 3                       | 2                         | 20  | 6. 9                        | 4                         | 8. 1   | 8. 0             |
| Albany <sup>4</sup> .....    | 34                       | 13. 7                      | 2                         | 40  | 12. 7                       | 3                         | 14. 8  | 15. 5            |
| Atlanta.....                 | 63                       | 11. 8                      | 8                         | 82  | 16. 7                       | 19                        | 15. 9  | 16. 8            |
| White.....                   | 29                       |                            | 3                         | 48  |                             | 7                         |  |                  |
| Colored.....                 | 34                       | ( <sup>5</sup> )           | 5                         | 144   | ( <sup>5</sup> )            | 12                        | ( <sup>5</sup> )                                     | ( <sup>5</sup> ) |
| Baltimore <sup>4</sup> ..... | 177                      | 11. 3                      | 19                        | 64  | 10. 9                       | 13                        | 15. 3  | 14. 5            |
| White.....                   | 135                      |                            | 9                         | 39  |                             | 7                         |  |                  |
| Colored.....                 | 42                       | ( <sup>5</sup> )           | 10                        | 156   | ( <sup>5</sup> )            | 6                         | ( <sup>5</sup> )                                     | ( <sup>5</sup> ) |
| Birmingham.....              | 61                       | 11. 8                      | 7                         | 70  | 18. 3                       | 11                        | 14. 6  | 14. 5            |
| White.....                   | 40                       |                            | 5                         | 86  |                             | 5                         |  |                  |
| Colored.....                 | 21                       | ( <sup>5</sup> )           | 2                         | 49  | ( <sup>5</sup> )            | 6                         | ( <sup>5</sup> )                                     | ( <sup>5</sup> ) |
| Boston.....                  | 176                      | 11. 7                      | 16                        | 46  | 9. 7                        | 14                        | 15. 0  | 15. 0            |
| Bridgeport.....              | 20                       | 7. 1                       | 2                         | 33  | 13. 1                       | 3                         | 11. 8  | 12. 2            |
| Buffalo.....                 | 126                      | 11. 3                      | 16                        | 65  | 11. 1                       | 15                        | 14. 0  | 13. 7            |
| Cambridge.....               | 24                       | 11. 0                      | 3                         | 60  | 6. 0                        | 0                         | 13. 1  | 12. 8            |
| Camden.....                  | 31                       | 13. 6                      | 0                         | 0   | 12. 3                       | 1                         | 15. 2  | 14. 2            |
| Canton.....                  | 14                       | 6. 8                       | 0                         | 0   | 7. 4                        | 4                         | 10. 7  | 10. 7            |
| Chicago <sup>4</sup> .....   | 638                      | 9. 6                       | 39                        | 34  | 8. 8                        | 34                        | 11. 5  | 11. 0            |
| Cincinnati.....              | 144                      | 16. 4                      | 13                        | 78  | 13. 6                       | 4                         | 16. 8  | 16. 0            |

See footnotes at end of table.

Deaths from all causes in certain large cities of the United States during the week ended July 18, 1931, infant mortality, annual death rate, and comparison with corresponding week of 1930. (From the Weekly Health Index, issued by the Bureau of the Census, Department of Commerce)—Continued

| City               | Week ended July 18, 1931 |                  |                     |                       | Corresponding week, 1930 |                     | Death rate for the first 29 weeks |                  |
|--------------------|--------------------------|------------------|---------------------|-----------------------|--------------------------|---------------------|-----------------------------------|------------------|
|                    | Total deaths             | Death rate       | Deaths under 1 year | Infant mortality rate | Death rate               | Deaths under 1 year | 1931                              | 1930             |
| Cleveland          | 173                      | 9.9              | 17                  | 49                    | 9.2                      | 15                  | 11.8                              | 11.8             |
| Columbus           | 60                       | 10.6             | 2                   | 20                    | 12.7                     | 5                   | 14.5                              | 16.9             |
| Dallas             | 50                       | 9.6              | 8                   |                       | 11.3                     | 11                  | 12.0                              | 12.0             |
| White              | 41                       |                  | 8                   |                       |                          | 10                  |                                   |                  |
| Colored            | 9                        | ( <sup>9</sup> ) | 0                   |                       | ( <sup>9</sup> )         | 1                   | ( <sup>9</sup> )                  | ( <sup>9</sup> ) |
| Dayton             | 33                       | 8.3              | 2                   | 28                    | 11.3                     | 7                   | 12.6                              | 10.4             |
| Denver             | 61                       | 10.9             | 4                   | 39                    | 14.5                     | 13                  | 14.6                              | 15.1             |
| Des Moines         | 30                       | 10.8             | 0                   | 0                     | 11.7                     | 2                   | 11.8                              | 12.4             |
| Detroit            | 224                      | 7.1              | 28                  | 45                    | 8.6                      | 31                  | 9.0                               | 10.0             |
| Duluth             | 22                       | 11.3             | 2                   | 49                    | 8.7                      | 3                   | 11.0                              | 11.7             |
| El Paso            | 21                       | 10.4             | 6                   |                       | 15.2                     | 11                  | 17.0                              | 18.5             |
| Erie               | 21                       | 9.3              | 2                   | 37                    | 8.1                      | 3                   | 11.0                              | 11.6             |
| Fall River         | 12                       | 8.4              | 1                   | 23                    | 9.0                      | 1                   | 12.4                              | 13.0             |
| Fort Worth         | 41                       | 12.8             | 2                   |                       | 7.3                      | 3                   | 11.5                              | 11.5             |
| White              | 33                       |                  | 2                   |                       |                          | 1                   |                                   |                  |
| Colored            | 8                        | ( <sup>9</sup> ) | 0                   |                       | ( <sup>9</sup> )         | 2                   | ( <sup>9</sup> )                  | ( <sup>9</sup> ) |
| Grand Rapids       | 26                       | 7.9              | 2                   | 30                    | 8.0                      | 4                   | 9.6                               | 11.1             |
| Houston            | 68                       | 11.4             | 11                  |                       | 12.0                     | 6                   | 11.6                              | 12.8             |
| White              | 52                       |                  | 9                   |                       |                          | 6                   |                                   |                  |
| Colored            | 16                       | ( <sup>9</sup> ) | 2                   |                       | ( <sup>9</sup> )         | 0                   | ( <sup>9</sup> )                  | ( <sup>9</sup> ) |
| Indianapolis       | 88                       | 12.4             | 7                   | 58                    | 12.3                     | 10                  | 14.5                              | 15.0             |
| White              | 74                       |                  | 4                   | 38                    |                          | 6                   |                                   |                  |
| Colored            | 14                       | ( <sup>9</sup> ) | 3                   | 201                   | ( <sup>9</sup> )         | 4                   | ( <sup>9</sup> )                  | ( <sup>9</sup> ) |
| Jersey City        | 50                       | 9.2              | 4                   | 36                    | 10.4                     | 6                   | 12.3                              | 12.1             |
| Kansas City, Kans. | 18                       | 7.6              | 1                   | 21                    | 10.7                     | 0                   | 13.8                              | 11.5             |
| White              | 14                       |                  | 1                   | 25                    |                          | 0                   |                                   |                  |
| Colored            | 4                        | ( <sup>9</sup> ) | 0                   | 0                     | ( <sup>9</sup> )         | 0                   | ( <sup>9</sup> )                  | ( <sup>9</sup> ) |
| Kansas City, Mo.   | 94                       | 12.0             | 7                   | 53                    | 14.2                     | 9                   | 14.2                              | 13.6             |
| Knoxville          | 25                       | 11.9             | 4                   | 85                    | 10.8                     | 5                   | 13.4                              | 14.5             |
| White              | 21                       |                  | 3                   | 71                    |                          | 4                   |                                   |                  |
| Colored            | 4                        | ( <sup>9</sup> ) | 1                   | 204                   | ( <sup>9</sup> )         | 1                   | ( <sup>9</sup> )                  | ( <sup>9</sup> ) |
| Long Beach         | 21                       | 7.2              | 2                   | 48                    | 12.3                     | 6                   | 10.2                              | 10.0             |
| Los Angeles        | 277                      | 11.0             | 17                  | 49                    | 13.2                     | 27                  | 11.2                              | 11.5             |
| Louisville         | 79                       | 13.4             | 2                   | 17                    | 11.3                     | 4                   | 15.2                              | 13.9             |
| White              | 59                       |                  | 0                   | 0                     |                          | 4                   |                                   |                  |
| Colored            | 20                       | ( <sup>9</sup> ) | 2                   | 133                   |                          | 0                   | ( <sup>9</sup> )                  | ( <sup>9</sup> ) |
| Lowell             | 8                        | 4.1              | 1                   | 25                    | 10.4                     | 4                   | 13.3                              | 14.4             |
| Lynn               | 18                       | 9.1              | 3                   | 7                     | 8.1                      | 1                   | 10.5                              | 11.3             |
| Memphis            | 79                       | 15.9             | 12                  | 127                   | 28.3                     | 10                  | 17.1                              | 18.3             |
| White              | 42                       |                  | 7                   | 117                   |                          | 3                   |                                   |                  |
| Colored            | 37                       | ( <sup>9</sup> ) | 5                   | 145                   | ( <sup>9</sup> )         | 7                   | ( <sup>9</sup> )                  | ( <sup>9</sup> ) |
| Miami              | 19                       | 8.8              | 1                   | 25                    | 10.8                     | 3                   | 12.6                              | 11.8             |
| White              | 12                       |                  | 1                   | 35                    |                          | 1                   |                                   |                  |
| Colored            | 7                        | ( <sup>9</sup> ) | 0                   | 0                     | ( <sup>9</sup> )         | 2                   | ( <sup>9</sup> )                  | ( <sup>9</sup> ) |
| Milwaukee          | 98                       | 8.7              | 12                  | 52                    | 7.8                      | 4                   | 10.0                              | 10.2             |
| Minneapolis        | 115                      | 12.7             | 7                   | 45                    | 10.6                     | 4                   | 12.1                              | 11.0             |
| Nashville          | 43                       | 14.4             | 3                   | 45                    | 17.9                     | 5                   | 17.4                              | 16.9             |
| White              | 23                       |                  | 0                   | 0                     |                          | 3                   |                                   |                  |
| Colored            | 20                       | ( <sup>9</sup> ) | 3                   | 177                   | ( <sup>9</sup> )         | 2                   | ( <sup>9</sup> )                  | ( <sup>9</sup> ) |
| New Bedford        | 27                       | 12.5             | 2                   | 53                    | 8.3                      | 1                   | 13.2                              | 11.9             |
| New Haven          | 36                       | 11.5             | 2                   | 38                    | 9.0                      | 3                   | 12.5                              | 13.9             |
| New Orleans        | 137                      | 15.3             | 16                  | 88                    | 14.5                     | 10                  | 17.8                              | 18.5             |
| White              | 86                       |                  | 10                  | 83                    |                          | 6                   |                                   |                  |
| Colored            | 51                       | ( <sup>9</sup> ) | 6                   | 98                    | ( <sup>9</sup> )         | 4                   | ( <sup>9</sup> )                  | ( <sup>9</sup> ) |
| New York           | 1,273                    | 9.4              | 102                 | 43                    | 9.1                      | 121                 | 12.0                              | 11.6             |
| Bronx Borough      | 180                      | 7.1              | 13                  | 29                    | 7.1                      | 12                  | 8.8                               | 8.3              |
| Brooklyn Borough   | 426                      | 8.5              | 31                  | 33                    | 7.7                      | 37                  | 11.1                              | 10.6             |
| Manhattan Borough  | 492                      | 14.1             | 48                  | 82                    | 13.8                     | 55                  | 15.3                              | 17.2             |
| Queens Borough     | 134                      | 6.1              | 8                   | 22                    | 6.3                      | 15                  | 7.7                               | 7.5              |
| Richmond Borough   | 41                       | 13.1             | 2                   | 36                    | 13.4                     | 2                   | 14.2                              | 14.9             |
| Newark, N. J.      | 78                       | 9.1              | 9                   | 47                    | 9.2                      | 8                   | 12.5                              | 13.0             |
| Oakland            | 54                       | 9.6              | 7                   | 89                    | 10.0                     | 2                   | 10.9                              | 11.4             |
| Oklahoma City      | 48                       | 12.7             | 6                   | 83                    | 10.0                     | 10                  | 11.7                              | 10.6             |
| Omaha              | 41                       | 9.9              | 3                   | 34                    | 20.4                     | 6                   | 14.5                              | 14.1             |
| Paterson           | 19                       | 7.1              | 1                   | 17                    | 7.9                      | 2                   | 14.2                              | 13.1             |
| Peoria             | 27                       | 13.0             | 6                   | 158                   | 11.8                     | 0                   | 13.5                              | 13.0             |
| Philadelphia       | 392                      | 10.4             | 29                  | 42                    | 10.2                     | 36                  | 14.2                              | 13.1             |
| Pittsburgh         | 154                      | 11.9             | 18                  | 62                    | 11.5                     | 15                  | 15.8                              | 14.6             |
| Portland, Oreg.    | 52                       | 8.8              | 3                   | 36                    | 12.6                     | 5                   | 12.0                              | 13.0             |

See footnotes at end of table.

Deaths from all causes in certain large cities of the United States during the week ended July 18, 1931, infant mortality, annual death rate, and comparison with corresponding week of 1930. (From the Weekly Health Index, issued by the Bureau of the Census, Department of Commerce)—Continued

| City                                | Week ended July 18, 1931 |                         |                     |                                    | Corresponding week, 1930 |                     | Death rate <sup>1</sup> for the first 29 weeks |                  |
|-------------------------------------|--------------------------|-------------------------|---------------------|------------------------------------|--------------------------|---------------------|--|------------------|
|                                     | Total deaths             | Death rate <sup>1</sup> | Deaths under 1 year | Infant mortality rate <sup>1</sup> | Death rate <sup>1</sup>  | Deaths under 1 year | 1931   | 1930             |
| Providence.....                     | 42                       | 8.6                     | 3                   | 28                                 | 11.1                     | 5                   | 13.6   | 14.1             |
| Richmond.....                       | 51                       | 14.4                    | 8                   | 117                                | 11.1                     | 3                   | 16.4   | 15.5             |
| White.....                          | 36                       |                         | 7                   | 153                                |                          | 0                   |  |                  |
| Colored.....                        | 15                       | ( <sup>6</sup> )        | 1                   | 43                                 | ( <sup>6</sup> )         | 3                   | ( <sup>6</sup> )                               | ( <sup>6</sup> ) |
| Rochester.....                      | 65                       | 10.2                    | 5                   | 46                                 | 9.8                      | 6                   | 12.8   | 12.1             |
| St. Louis.....                      | 220                      | 13.9                    | 14                  | 47                                 | 28.0                     | 28                  | 16.6   | 15.0             |
| St. Paul.....                       | 59                       | 11.1                    | 6                   | 62                                 | 10.3                     | 2                   | 11.6   | 10.8             |
| Salt Lake City <sup>1</sup> .....   | 30                       | 10.9                    | 4                   | 60                                 | 10.7                     | 3                   | 12.7   | 13.3             |
| San Antonio.....                    | 47                       | 10.2                    | 5                   |                                    | 12.7                     | 9                   | 15.7   | 18.2             |
| San Diego.....                      | 28                       | 9.3                     | 1                   | 20                                 | 15.3                     | 2                   | 14.3   | 14.8             |
| San Francisco.....                  | 159                      | 12.8                    | 6                   | 40                                 | 13.9                     | 5                   | 13.4   | 13.4             |
| Schenectady.....                    | 26                       | 14.1                    | 2                   | 89                                 | 12.0                     | 2                   | 10.8   | 11.8             |
| Seattle.....                        | 68                       | 9.5                     | 1                   | 9                                  | 9.1                      | 4                   | 11.9   | 11.3             |
| Somerville.....                     | 12                       | 8.9                     | 1                   | 37                                 | 8.6                      | 1                   | 10.0   | 10.6             |
| South Bend.....                     | 13                       | 6.3                     | 0                   | 0                                  | 9.4                      | 2                   | 8.6  | 9.5              |
| Spokane.....                        | 22                       | 9.9                     | 1                   | 26                                 | 12.6                     | 1                   | 12.7   | 13.0             |
| Springfield, Mass.....              | 24                       | 8.2                     | 4                   | 61                                 | 10.4                     | 1                   | 12.6   | 13.1             |
| Syracuse.....                       | 37                       | 9.1                     | 5                   | 53                                 | 7.4                      | 3                   | 12.2   | 12.3             |
| Tacoma.....                         | 17                       | 8.2                     | 2                   | 51                                 | 7.3                      | 2                   | 12.9   | 12.8             |
| Toledo.....                         | 64                       | 11.3                    | 5                   | 46                                 | 8.8                      | 8                   | 12.6   | 13.2             |
| Trenton.....                        | 30                       | 12.6                    | 4                   | 70                                 | 10.6                     | 3                   | 17.6   | 17.1             |
| Utica.....                          | 22                       | 11.2                    | 0                   | 0                                  | 15.9                     | 2                   | 14.8   | 15.9             |
| Washington, D. C.....               | 124                      | 13.1                    | 14                  | 78                                 | 12.7                     | 9                   | 16.6   | 15.7             |
| White.....                          | 72                       |                         | 8                   | 65                                 |                          | 6                   |  |                  |
| Colored.....                        | 52                       | ( <sup>6</sup> )        | 6                   | 103                                | ( <sup>6</sup> )         | 3                   | ( <sup>6</sup> )                               | ( <sup>6</sup> ) |
| Waterbury.....                      | 16                       | 8.3                     | 3                   | 90                                 | 9.9                      | 2                   | 10.2   | 10.5             |
| Wilmington, Del. <sup>1</sup> ..... | 13                       | 6.4                     | 0                   | 0                                  | 12.2                     | 1                   | 14.8   | 14.9             |
| Worcester.....                      | 28                       | 7.4                     | 0                   | 0                                  | 9.9                      | 2                   | 13.1   | 13.5             |
| Yonkers.....                        | 17                       | 6.4                     | 2                   | 52                                 | 6.5                      | 5                   | 9.2  | 8.4              |
| Youngstown.....                     | 39                       | 11.8                    | 1                   | 14                                 | 8.9                      | 2                   | 11.0   | 10.5             |

<sup>1</sup> Deaths of nonresidents are included. Stillbirths are excluded.

<sup>2</sup> These rates represent annual rates per 1,000 population, as estimated for 1931 and 1930 by the arithmetical method.

<sup>3</sup> Deaths under 1 year of age per 1,000 live births. Cities left blank are not in the registration area for births.

<sup>4</sup> Data for 75 cities.

<sup>5</sup> Deaths for week ended Friday.

<sup>6</sup> For the cities for which deaths are shown by color, the percentage of colored population in 1920 was as follows: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Kansas City, Kans., 14; Knoxville, 15; Louisville, 17; Memphis, 38; Miami, 31; Nashville, 30; New Orleans, 26; Richmond, 32; and Washington, D. C., 25.

<sup>7</sup> Population Apr. 1, 1930; decreased 1920 to 1930, no estimate made.

# PREVALENCE OF DISEASE

*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring*

## UNITED STATES

### CURRENT WEEKLY STATE REPORTS

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers

Reports for Weeks Ended July 25, 1931, and July 26, 1930

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended July 25, 1931, and July 26, 1930

| Division and State                | Diphtheria               |                          | Influenza                |                          | Measles                  |                          | Meningococcus meningitis |                          |
|-----------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                   | Week ended July 25, 1931 | Week ended July 26, 1930 | Week ended July 25, 1931 | Week ended July 26, 1930 | Week ended July 25, 1931 | Week ended July 26, 1930 | Week ended July 25, 1931 | Week ended July 26, 1930 |
| <b>New England States:</b>        |                          |                          |                          |                          |                          |                          |                          |                          |
| Maine.....                        |                          | 4                        |                          | 1                        | 11                       | 6                        | 0                        | 0                        |
| New Hampshire.....                |                          | 1                        |                          |                          |                          | 5                        | 0                        | 0                        |
| Vermont.....                      |                          |                          |                          |                          | 21                       | 1                        | 0                        | 0                        |
| Massachusetts.....                | 36                       | 23                       | 2                        |                          | 135                      | 153                      | 1                        | 1                        |
| Rhode Island.....                 | 1                        | 1                        |                          |                          | 67                       | 10                       | 0                        | 0                        |
| Connecticut.....                  | 9                        | 6                        |                          |                          | 55                       | 8                        | 0                        | 2                        |
| <b>Middle Atlantic States:</b>    |                          |                          |                          |                          |                          |                          |                          |                          |
| New York.....                     | 78                       | 63                       | 13                       |                          | 531                      | 360                      | 9                        | 8                        |
| New Jersey.....                   | 20                       | 52                       |                          |                          | 120                      | 172                      | 4                        | 5                        |
| Pennsylvania.....                 | 46                       | 69                       |                          |                          | 320                      | 269                      | 5                        | 6                        |
| <b>East North Central States:</b> |                          |                          |                          |                          |                          |                          |                          |                          |
| Ohio.....                         | 15                       | 17                       | 5                        | 7                        | 74                       | 73                       | 1                        | 3                        |
| Indiana.....                      | 12                       | 4                        | 4                        | 2                        | 25                       | 13                       | 2                        | 5                        |
| Illinois.....                     | 61                       | 64                       | 148                      | 2                        | 240                      | 56                       | 8                        | 3                        |
| Michigan.....                     | 28                       | 67                       |                          | 2                        | 33                       | 98                       | 2                        | 5                        |
| Wisconsin.....                    | 9                        | 15                       | 2                        | 4                        | 130                      | 112                      | 2                        | 2                        |
| <b>West North Central States:</b> |                          |                          |                          |                          |                          |                          |                          |                          |
| Minnesota.....                    | 5                        | 16                       | 1                        |                          | 22                       | 11                       | 2                        | 1                        |
| Iowa.....                         | 5                        | 4                        |                          |                          | 6                        | 8                        | 0                        | 0                        |
| Missouri.....                     | 11                       | 11                       |                          |                          | 26                       | 21                       | 1                        | 0                        |
| North Dakota.....                 |                          | 4                        |                          |                          | 9                        | 6                        | 0                        | 1                        |
| South Dakota.....                 | 2                        | 1                        |                          |                          | 1                        | 12                       | 0                        | 0                        |
| Nebraska.....                     | 3                        | 6                        |                          |                          | 2                        | 4                        | 1                        | 0                        |
| Kansas.....                       | 10                       | 6                        | 1                        |                          | 33                       | 38                       | 1                        | 3                        |
| <b>South Atlantic States:</b>     |                          |                          |                          |                          |                          |                          |                          |                          |
| Delaware.....                     |                          | 1                        |                          |                          | 10                       | 5                        | 0                        | 0                        |
| Maryland.....                     | 7                        | 13                       | 1                        | 2                        | 33                       | 8                        | 2                        | 2                        |
| District of Columbia.....         | 5                        | 8                        |                          |                          |                          | 13                       | 1                        | 0                        |
| West Virginia.....                | 3                        | 5                        |                          | 10                       | 48                       | 17                       | 1                        | 1                        |
| North Carolina.....               | 11                       | 27                       |                          | 2                        | 85                       | 10                       | 0                        | 0                        |
| South Carolina.....               | 8                        | 8                        | 42                       | 68                       | 48                       |                          | 0                        | 0                        |
| Georgia.....                      | 3                        | 5                        | 8                        | 13                       | 9                        | 37                       | 0                        | 1                        |
| Florida.....                      | 4                        | 4                        |                          |                          | 10                       | 5                        | 0                        | 0                        |
| <b>East South Central States:</b> |                          |                          |                          |                          |                          |                          |                          |                          |
| Kentucky.....                     |                          |                          |                          |                          | 80                       |                          | 0                        | 2                        |
| Tennessee.....                    | 2                        | 2                        | 2                        | 3                        | 4                        | 3                        | 2                        | 1                        |
| Alabama.....                      | 6                        | 10                       |                          | 3                        | 27                       | 33                       | 3                        | 0                        |
| Mississippi.....                  | 6                        | 9                        |                          |                          |                          |                          | 5                        | 1                        |

<sup>1</sup> New York City only.

<sup>2</sup> Week ended Friday.

<sup>3</sup> Typhus fever: 1931, 8 cases; 2 cases in Maryland; 4 cases in Georgia; and 2 cases in Florida.



*Cases of certain communicable diseases reported by telegraph by State health officers  
for weeks ended July 25, 1931, and July 26, 1930—Continued*

| Division and State                | Diphtheria               |                          | Influenza                |                          | Measles                  |                          | Meningococcus meningitis |                          |
|-----------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                   | Week ended July 25, 1931 | Week ended July 26, 1930 | Week ended July 25, 1931 | Week ended July 26, 1930 | Week ended July 25, 1931 | Week ended July 26, 1930 | Week ended July 25, 1931 | Week ended July 26, 1930 |
| <b>West South Central States:</b> |                          |                          |                          |                          |                          |                          |                          |                          |
| Arkansas.....                     | 3                        | 1                        |                          | 5                        | 1                        |                          | 1                        | 1                        |
| Louisiana.....                    | 14                       | 6                        | 17                       | 6                        | 1                        | 5                        | 1                        | 1                        |
| Oklahoma.....                     | 13                       | 6                        | 9                        | 2                        | 4                        | 7                        | 0                        | 1                        |
| Texas.....                        | 12                       | 2                        |                          | 10                       | 1                        | 28                       | 1                        | 0                        |
| <b>Mountain States:</b>           |                          |                          |                          |                          |                          |                          |                          |                          |
| Montana.....                      | 2                        |                          |                          |                          | 11                       | 7                        | 0                        | 0                        |
| Idaho.....                        |                          |                          |                          |                          | 2                        | 5                        | 0                        | 0                        |
| Wyoming.....                      |                          | 1                        |                          |                          | 1                        | 16                       | 0                        | 0                        |
| Colorado.....                     | 5                        | 8                        |                          |                          | 3                        | 23                       | 0                        | 0                        |
| New Mexico.....                   |                          | 2                        |                          |                          | 1                        | 10                       | 0                        | 0                        |
| Arizona.....                      | 2                        | 1                        | 1                        |                          |                          | 18                       | 0                        | 1                        |
| Utah.....                         |                          |                          |                          |                          | 7                        | 7                        | 1                        | 1                        |
| <b>Pacific States:</b>            |                          |                          |                          |                          |                          |                          |                          |                          |
| Washington.....                   | 4                        | 4                        |                          |                          | 14                       | 63                       | 0                        | 2                        |
| Oregon.....                       | 4                        | 4                        | 4                        | 4                        | 2                        | 29                       | 0                        | 0                        |
| California.....                   | 21                       | 26                       | 14                       | 11                       | 148                      | 181                      | 2                        | 4                        |
|                                   |                          |                          |                          |                          |                          |                          |                          |                          |
| Division and State                | Poliomyelitis            |                          | Scarlet fever            |                          | Smallpox                 |                          | Typhoid fever            |                          |
|                                   | Week ended July 25, 1931 | Week ended July 26, 1930 | Week ended July 25, 1931 | Week ended July 26, 1930 | Week ended July 25, 1931 | Week ended July 26, 1930 | Week ended July 25, 1931 | Week ended July 26, 1930 |
| <b>New England States:</b>        |                          |                          |                          |                          |                          |                          |                          |                          |
| Maine.....                        | 1                        | 0                        | 9                        | 16                       | 0                        | 0                        | 0                        | 2                        |
| New Hampshire.....                | 0                        | 0                        | 1                        | 0                        | 0                        | 0                        | 0                        | 0                        |
| Vermont.....                      | 0                        | 0                        | 7                        | 1                        | 1                        | 0                        | 0                        | 0                        |
| Massachusetts.....                | 16                       | 8                        | 120                      | 80                       | 0                        | 0                        | 8                        | 2                        |
| Rhode Island.....                 | 0                        | 0                        | 6                        | 6                        | 0                        | 0                        | 0                        | 0                        |
| Connecticut.....                  | 11                       | 4                        | 9                        | 10                       | 0                        | 0                        | 1                        | 2                        |
| <b>Middle Atlantic States:</b>    |                          |                          |                          |                          |                          |                          |                          |                          |
| New York.....                     | 204                      | 15                       | 113                      | 93                       | 6                        | 4                        | 16                       | 25                       |
| New Jersey.....                   | 14                       | 0                        | 52                       | 20                       | 0                        | 0                        | 4                        | 6                        |
| Pennsylvania.....                 | 7                        | 5                        | 113                      | 80                       | 0                        | 0                        | 24                       | 25                       |
| <b>East North Central States:</b> |                          |                          |                          |                          |                          |                          |                          |                          |
| Ohio.....                         | 1                        | 3                        | 43                       | 55                       | 9                        | 37                       | 15                       | 27                       |
| Indiana.....                      | 0                        | 0                        | 17                       | 20                       | 11                       | 40                       | 7                        | 6                        |
| Illinois.....                     | 12                       | 6                        | 104                      | 72                       | 43                       | 38                       | 17                       | 32                       |
| Michigan.....                     | 9                        | 0                        | 87                       | 61                       | 6                        | 34                       | 3                        | 10                       |
| Wisconsin.....                    | 6                        | 0                        | 25                       | 36                       | 1                        |                          | 6                        | 3                        |
| <b>West North Central States:</b> |                          |                          |                          |                          |                          |                          |                          |                          |
| Minnesota.....                    | 3                        | 16                       | 20                       | 16                       | 0                        | 2                        | 2                        | 5                        |
| Iowa.....                         | 1                        | 1                        | 8                        | 2                        | 10                       | 21                       | 6                        | 1                        |
| Missouri.....                     | 0                        | 0                        | 16                       | 9                        | 3                        | 25                       | 23                       | 13                       |
| North Dakota.....                 | 0                        | 1                        | 0                        | 10                       | 14                       | 9                        | 0                        | 1                        |
| South Dakota.....                 | 0                        | 1                        | 3                        | 3                        | 1                        | 10                       | 6                        | 1                        |
| Nebraska.....                     | 0                        | 0                        | 4                        | 4                        | 5                        | 18                       | 0                        | 17                       |
| Kansas.....                       | 3                        | 7                        | 12                       | 23                       | 16                       | 20                       | 13                       | 16                       |
| <b>South Atlantic States:</b>     |                          |                          |                          |                          |                          |                          |                          |                          |
| Delaware.....                     | 0                        | 0                        | 5                        | 5                        | 0                        | 0                        | 0                        | 0                        |
| Maryland.....                     | 1                        | 1                        | 12                       | 6                        | 1                        | 0                        | 16                       | 25                       |
| District of Columbia.....         | 0                        | 0                        | 2                        | 2                        | 0                        | 0                        | 4                        | 1                        |
| West Virginia.....                | 1                        | 1                        | 4                        | 23                       | 3                        | 3                        | 16                       | 28                       |
| North Carolina.....               | 2                        | 3                        | 23                       | 22                       | 0                        | 4                        | 64                       | 56                       |
| South Carolina.....               | 2                        | 2                        | 0                        | 2                        | 0                        | 0                        | 72                       | 70                       |
| Georgia.....                      | 0                        | 0                        | 13                       | 10                       | 2                        | 0                        | 80                       | 73                       |
| Florida.....                      | 0                        | 0                        | 1                        | 2                        | 0                        | 2                        | 19                       | 0                        |
| <b>East South Central States:</b> |                          |                          |                          |                          |                          |                          |                          |                          |
| Kentucky.....                     | 0                        | 0                        | 17                       | 5                        | 1                        | 11                       | 25                       | 39                       |
| Tennessee.....                    | 1                        | 0                        | 8                        | 13                       | 4                        | 3                        | 41                       | 50                       |
| Alabama.....                      | 1                        | 2                        | 8                        | 9                        | 4                        | 0                        | 30                       | 36                       |
| Mississippi.....                  | 0                        | 4                        | 2                        | 2                        | 6                        | 1                        | 42                       | 58                       |
| <b>West South Central States:</b> |                          |                          |                          |                          |                          |                          |                          |                          |
| Arkansas.....                     | 0                        | 7                        | 2                        | 2                        | 1                        | 4                        | 17                       | 30                       |
| Louisiana.....                    | 1                        | 27                       | 9                        | 9                        | 1                        | 6                        | 48                       | 52                       |
| Oklahoma.....                     | 2                        | 13                       | 9                        | 14                       | 10                       | 42                       | 28                       | 52                       |
| Texas.....                        | 1                        | 2                        | 5                        | 6                        | 18                       | 8                        | 43                       | 20                       |

<sup>1</sup> Week ended Friday.

<sup>2</sup> Typhus fever: 1931, 8 cases; 2 cases in Maryland; 4 cases in Georgia; and 2 cases in Florida.

<sup>3</sup> Figures for 1931 are exclusive of Oklahoma City and Tulsa.

*Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended July 25, 1931, and July 26, 1930—Continued*

| Division and State      | Pollomyelitis            |                          | Scarlet fever            |                          | Smallpox                 |                          | Typhoid fever            |                          |
|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                         | Week ended July 25, 1931 | Week ended July 26, 1930 | Week ended July 25, 1931 | Week ended July 26, 1930 | Week ended July 25, 1931 | Week ended July 26, 1930 | Week ended July 25, 1931 | Week ended July 26, 1930 |
| <b>Mountain States:</b> |                          |                          |                          |                          |                          |                          |                          |                          |
| Montana.....            | 1                        | 0                        | 3                        | 3                        | 2                        | 0                        | 2                        | 1                        |
| Idaho.....              | 0                        | 0                        | 3                        | 0                        | 1                        | 1                        | 0                        | 2                        |
| Wyoming.....            | 0                        | 0                        | 1                        | 2                        | 1                        | 2                        | 0                        | 0                        |
| Colorado.....           | 0                        | 1                        | 3                        | 3                        | 0                        | 2                        | 7                        | 1                        |
| New Mexico.....         | 0                        | 1                        | 0                        | 2                        | 0                        | 6                        | 11                       | 3                        |
| Arizona.....            | 0                        | 3                        | 0                        | 3                        | 0                        | 1                        | 6                        | 4                        |
| Utah <sup>1</sup> ..... | 0                        | 0                        | 0                        | 2                        | 0                        | 0                        | 0                        | 1                        |
| <b>Pacific States:</b>  |                          |                          |                          |                          |                          |                          |                          |                          |
| Washington.....         | 2                        | 0                        | 6                        | 13                       | 17                       | 21                       | 6                        | 4                        |
| Oregon.....             | 0                        | 1                        | 10                       | 3                        | 1                        | 5                        | 3                        | 4                        |
| California.....         | 4                        | 89                       | 33                       | 44                       | 4                        | 6                        | 20                       | 32                       |

<sup>1</sup> Week ended Friday.

### SUMMARY OF MONTHLY REPORTS FROM STATES

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

| State                       | Menin-<br>gococ-<br>cus<br>menin-<br>gitis | Diph-<br>theria | Influ-<br>enza | Ma-<br>laria | Meas-<br>les | Pel-<br>lagra | Pollo-<br>mye-<br>litis | Scarlet<br>fever | Small-<br>pox | Ty-<br>phoid<br>fever |
|-----------------------------|--|-----------------|----------------|--------------|--------------|---------------|-------------------------|------------------|---------------|-----------------------|
| <i>June, 1931</i>           |  |                 |                |              |              |               |                         |                  |               |                       |
| Alabama.....                | 11   | 32              | 29             | 226          | 241          | 314           | 4                       | 39               | 46            | 69                    |
| Illinois.....               | 41   | 451             | 26             | 26           | 6,290        | —             | 5                       | 1,465            | 246           | 32                    |
| Louisiana.....              | 5  | 87              | 42             | 46           | 15           | 271           | 4                       | 49               | 75            | 104                   |
| Maryland.....               | 6  | 55              | 14             | 2            | 1,868        | 2             | 0                       | 152              | 1             | 29                    |
| Michigan.....               | 21   | 149             | 11             | 1            | 1,366        | —             | 9                       | 1,634            | 82            | 22                    |
| Missouri.....               | 12   | 79              | 2              | 23           | 636          | —             | 3                       | 382              | 181           | 35                    |
| New Mexico.....             | —  | 25              | —              | 14           | 180          | 2             | 0                       | 18               | 1             | 12                    |
| North Carolina.....         | 10   | 56              | 14             | —            | 2,307        | 595           | 3                       | 98               | 6             | 94                    |
| Oklahoma <sup>1</sup> ..... | 1  | 29              | 56             | 205          | 58           | 144           | 2                       | 39               | 196           | 50                    |
| Oregon.....                 | —  | 14              | 35             | —            | 160          | —             | 0                       | 47               | 52            | 12                    |
| Wisconsin.....              | 5  | 34              | 45             | —            | 2,626        | —             | 2                       | 283              | 38            | 8                     |

<sup>1</sup> Exclusive of Oklahoma City and Tulsa.

| June, 1931                     | Cases |
|--------------------------------|-------|
| <b>Actinomycoosis:</b>         |       |
| Illinois.....                  | 1     |
| <b>Anthrax:</b>                |       |
| Louisiana.....                 | 1     |
| <b>Chicken pox:</b>            |       |
| Alabama.....                   | 57    |
| Illinois.....                  | 1,447 |
| Louisiana.....                 | 24    |
| Maryland.....                  | 219   |
| Michigan.....                  | 1,399 |
| Missouri.....                  | 170   |
| New Mexico.....                | 77    |
| North Carolina.....            | 193   |
| Oklahoma <sup>1</sup> .....    | 63    |
| Oregon.....                    | 147   |
| Wisconsin.....                 | 1,397 |
| <b>Conjunctivitis:</b>         |       |
| New Mexico.....                | 2     |
| <b>Diarrhea:</b>               |       |
| Maryland.....                  | 17    |
| <b>Dysentery:</b>              |       |
| Illinois.....                  | 23    |
| Illinois (amebic).....         | 1     |
| Illinois (bacillary).....      | 1     |
| Louisiana.....                 | 3     |
| Maryland.....                  | 10    |
| Oklahoma <sup>1</sup> .....    | 14    |
| <b>German measles:</b>         |       |
| Illinois.....                  | 129   |
| Maryland.....                  | 107   |
| North Carolina.....            | 299   |
| Wisconsin.....                 | 620   |
| <b>Hookworm disease:</b>       |       |
| Louisiana.....                 | 16    |
| <b>Impetigo contagiosa:</b>    |       |
| Maryland.....                  | 9     |
| Oregon.....                    | 19    |
| <b>Lead poisoning:</b>         |       |
| Illinois.....                  | 4     |
| <b>Lethargic encephalitis:</b> |       |
| Alabama.....                   | 4     |
| Illinois.....                  | 5     |
| Louisiana.....                 | 4     |
| Maryland.....                  | 1     |
| Michigan.....                  | 3     |
| New Mexico.....                | 1     |
| <b>Mumps:</b>                  |       |
| Alabama.....                   | 59    |
| Illinois.....                  | 747   |
| Louisiana.....                 | 12    |
| Maryland.....                  | 201   |
| Michigan.....                  | 658   |
| Missouri.....                  | 86    |
| New Mexico.....                | 23    |
| Oklahoma <sup>1</sup> .....    | 7     |
| Oregon.....                    | 128   |
| Wisconsin.....                 | 2,048 |
| <b>Ophthalmia neonatorum:</b>  |       |
| Illinois.....                  | 15    |
| Maryland.....                  | 2     |
| Missouri.....                  | 3     |
| North Carolina.....            | 1     |
| Oklahoma <sup>1</sup> .....    | 1     |
| <b>Paratyphoid fever:</b>      |       |
| Illinois.....                  | 5     |
| North Carolina.....            | 4     |

| Puerperal septicemia:                        | Cases |
|--|-------|
| Illinois.....                                | 7     |
| <b>Rabies in animals:</b>                    |       |
| Illinois.....                                | 21    |
| Louisiana.....                               | 10    |
| Maryland.....                                | 4     |
| Missouri.....                                | 7     |
| <b>Rocky Mountain spotted or tick fever:</b> |       |
| Maryland.....                                | 6     |
| Oregon.....                                  | 6     |
| <b>Scabies:</b>                              |       |
| Oregon.....                                  | 4     |
| <b>Septic sore throat:</b>                   |       |
| Illinois.....                                | 4     |
| Louisiana.....                               | 1     |
| Maryland.....                                | 3     |
| Michigan.....                                | 30    |
| Missouri.....                                | 1     |
| North Carolina.....                          | 5     |
| Oklahoma <sup>1</sup> .....                  | 10    |
| Oregon.....                                  | 6     |
| <b>Tetanus:</b>                              |       |
| Illinois.....                                | 5     |
| Louisiana.....                               | 5     |
| Missouri.....                                | 1     |
| Oklahoma <sup>1</sup> .....                  | 1     |
| <b>Trachoma:</b>                             |       |
| Illinois.....                                | 3     |
| Missouri.....                                | 83    |
| Oklahoma <sup>1</sup> .....                  | 29    |
| <b>Trench mouth:</b>                         |       |
| Oklahoma <sup>1</sup> .....                  | 1     |
| <b>Tularaemia:</b>                           |       |
| Louisiana.....                               | 1     |
| Missouri.....                                | 5     |
| <b>Typhus fever:</b>                         |       |
| Alabama.....                                 | 4     |
| Maryland.....                                | 5     |
| North Carolina.....                          | 1     |
| <b>Undulant fever:</b>                       |       |
| Alabama.....                                 | 1     |
| Illinois.....                                | 5     |
| Louisiana.....                               | 3     |
| Maryland.....                                | 7     |
| Michigan.....                                | 1     |
| Missouri.....                                | 24    |
| New Mexico.....                              | 1     |
| Oregon.....                                  | 1     |
| Wisconsin.....                               | 3     |
| <b>Vincent's angina:</b>                     |       |
| Maryland.....                                | 14    |
| Oregon.....                                  | 12    |
| <b>Whooping cough:</b>                       |       |
| Alabama.....                                 | 90    |
| Illinois.....                                | 957   |
| Louisiana.....                               | 21    |
| Maryland.....                                | 352   |
| Michigan.....                                | 1,286 |
| Missouri.....                                | 324   |
| New Mexico.....                              | 54    |
| North Carolina.....                          | 1,091 |
| Oklahoma <sup>1</sup> .....                  | 53    |
| Oregon.....                                  | 95    |
| Wisconsin.....                               | 471   |

<sup>1</sup> Exclusive of Oklahoma City and Tulsa.

## GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

The 96 cities reporting cases used in the following table are situated in all parts of the country and have an estimated aggregate population of more than 32,965,000. The estimated population of the 89 cities reporting deaths is more than 31,420,000. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

*Weeks ended July 18, 1931, and July 19, 1930*

|                           | 1931  | 1930  | Esti-<br>mated<br>expect-<br>ancy |
|---------------------------|-------|-------|-----------------------------------|
| <i>Cases reported</i>     |       |       |                                   |
| Diphtheria:               |       |       |                                   |
| 46 States.....            | 568   | 637   | -----                             |
| 96 cities.....            | 268   | 287   | 470                               |
| Measles:                  |       |       |                                   |
| 46 States.....            | 3,629 | 2,953 | -----                             |
| 96 cities.....            | 1,159 | 911   | -----                             |
| Meningococcus meningitis: |       |       |                                   |
| 46 States.....            | 49    | 90    | -----                             |
| 96 cities.....            | 30    | 30    | -----                             |
| Pollomyelitis:            |       |       |                                   |
| 46 States.....            | 116   | 196   | -----                             |
| Scarlet fever:            |       |       |                                   |
| 46 States.....            | 1,141 | 822   | -----                             |
| 96 cities.....            | 435   | 323   | 397                               |
| Smallpox:                 |       |       |                                   |
| 46 States.....            | 217   | 497   | -----                             |
| 96 cities.....            | 22    | 38    | 23                                |
| Typhoid fever:            |       |       |                                   |
| 46 States.....            | 755   | 787   | -----                             |
| 96 cities.....            | 84    | 98    | 84                                |
| <i>Deaths reported</i>    |       |       |                                   |
| Influenza and pneumonia:  |       |       |                                   |
| 89 cities.....            | 294   | 270   | -----                             |
| Smallpox:                 |       |       |                                   |
| 89 cities.....            | 0     | 0     | -----                             |



## City reports for week ended July 18, 1931

The "estimated expectancy" given for diphtheria, poliomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence the number of cases of the disease under consideration that may be expected to occur during a certain week in the absence of epidemics. It is based on reports to the Public Health Service during the past nine years. It is in most instances the median number of cases reported in the corresponding weeks of the preceding years. When the reports include several epidemics, or when for other reasons the median is unsatisfactory, the epidemic periods are excluded, and the estimated expectancy is the mean number of cases reported for the week during nonepidemic years.

If the reports have not been received for the full nine years, data are used for as many years as possible but no year earlier than 1922 is included. In obtaining the estimated expectancy, the figures are smoothed when necessary to avoid abrupt deviation from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

| Division, State, and city | Chicken pox, cases reported | Diphtheria                  |                | Influenza      |                 | Measles, cases reported | Mumps, cases reported | Pneumonia, deaths reported |
|---------------------------|-----------------------------|-----------------------------|----------------|----------------|-----------------|-------------------------|-----------------------|----------------------------|
|                           |                             | Cases, estimated expectancy | Cases reported | Cases reported | Deaths reported |                         |                       |                            |
| NEW ENGLAND               |                             |                             |                |                |                 |                         |                       |                            |
| Maine:                    |                             |                             |                |                |                 |                         |                       |                            |
| Portland.....             | 1                           | 0                           | 0              | -----          | 0               | 0                       | 1                     | 0                          |
| New Hampshire:            |                             |                             |                |                |                 |                         |                       |                            |
| Concord.....              | 0                           | 0                           | 0              | -----          | 0               | 0                       | 0                     | 0                          |
| Nashua.....               | 0                           | 0                           | 0              | -----          | 0               | 0                       | 0                     | 0                          |
| Vermont:                  |                             |                             |                |                |                 |                         |                       |                            |
| Barre.....                | 0                           | 0                           | 0              | -----          | 0               | 0                       | 0                     | 1                          |
| Burlington.....           | 0                           | 0                           | 0              | -----          | 0               | 0                       | 1                     | 0                          |
| Massachusetts:            |                             |                             |                |                |                 |                         |                       |                            |
| Boston.....               | 22                          | 21                          | 22             | 2              | 0               | 32                      | 8                     | 8                          |
| Fall River.....           | 1                           | 2                           | 0              | -----          | 0               | 18                      | 2                     | 1                          |
| Springfield.....          | 1                           | 1                           | 1              | -----          | 0               | 6                       | 7                     | 1                          |
| Worcester.....            | 1                           | 0                           | 0              | -----          | 0               | 3                       | 6                     | 2                          |
| Rhode Island:             |                             |                             |                |                |                 |                         |                       |                            |
| Pawtucket.....            | 0                           | 1                           | 0              | -----          | 0               | 0                       | 0                     | 0                          |
| Providence.....           | 0                           | 3                           | 4              | -----          | 0               | 46                      | 8                     | 3                          |
| Connecticut:              |                             |                             |                |                |                 |                         |                       |                            |
| Bridgeport.....           | 1                           | 2                           | 0              | -----          | 0               | 16                      | 0                     | 2                          |
| Hartford.....             | 3                           | 2                           | 0              | -----          | 0               | 0                       | 0                     | 2                          |
| New Haven.....            | 1                           | 1                           | 0              | -----          | 0               | 11                      | 0                     | 1                          |
| MIDDLE ATLANTIC           |                             |                             |                |                |                 |                         |                       |                            |
| New York:                 |                             |                             |                |                |                 |                         |                       |                            |
| Buffalo.....              | 4                           | 7                           | 3              | -----          | 0               | 18                      | 10                    | 8                          |
| New York.....             | 53                          | 148                         | 60             | 1              | 1               | 166                     | 34                    | 83                         |
| Rochester.....            | 1                           | 3                           | 3              | 1              | 0               | 64                      | 4                     | 3                          |
| Syracuse.....             | 2                           | 1                           | 0              | -----          | 0               | 9                       | 0                     | 0                          |
| New Jersey:               |                             |                             |                |                |                 |                         |                       |                            |
| Camden.....               | 1                           | 3                           | 1              | -----          | 0               | 2                       | 0                     | 1                          |
| Newark.....               |                             | 9                           |                | -----          |                 |                         |                       |                            |
| Trenton.....              | 2                           | 1                           | 0              | -----          | 0               | 12                      | 6                     | 0                          |
| Pennsylvania:             |                             |                             |                |                |                 |                         |                       |                            |
| Philadelphia.....         | 21                          | 35                          | 9              | 3              | 0               | 33                      | 10                    | 28                         |
| Pittsburgh.....           | 12                          | 12                          | 3              | -----          | 0               | 14                      | 28                    | 13                         |
| Reading.....              | 2                           | 1                           | 0              | -----          | 0               | 0                       | 3                     | 0                          |
| EAST NORTH CENTRAL        |                             |                             |                |                |                 |                         |                       |                            |
| Ohio:                     |                             |                             |                |                |                 |                         |                       |                            |
| Cincinnati.....           | 1                           | 3                           | 2              | -----          | 1               | 12                      | 6                     | 3                          |
| Cleveland.....            | 24                          | 17                          | 3              | -----          | 0               | 113                     | 67                    | 8                          |
| Columbus.....             | 1                           | 2                           | 1              | -----          | 0               | 5                       | 1                     | 4                          |
| Toledo.....               | 6                           | 0                           | 3              | -----          | 1               | 12                      | 1                     | 1                          |
| Indiana:                  |                             |                             |                |                |                 |                         |                       |                            |
| Fort Wayne.....           | 1                           | 1                           | 1              | -----          | 0               | 0                       | 0                     | 1                          |
| Indianapolis.....         | 1                           | 1                           | 3              | -----          | 0               | 4                       | 4                     | 6                          |
| South Bend.....           | 0                           | 0                           | 0              | -----          | 0               | 1                       | 0                     | 0                          |
| Terre Haute.....          | 0                           | 0                           | 0              | -----          | 0               | 2                       | 0                     | 1                          |
| Illinois:                 |                             |                             |                |                |                 |                         |                       |                            |
| Chicago.....              | 33                          | 62                          | 48             | -----          | 3               | 227                     | 12                    | 15                         |
| Springfield.....          | 2                           | 0                           | 0              | -----          | 0               | 0                       | 2                     | 0                          |
| Michigan:                 |                             |                             |                |                |                 |                         |                       |                            |
| Detroit.....              | 16                          | 28                          | 21             | -----          | 1               | 11                      | 4                     | 7                          |
| Flint.....                | 3                           | 1                           | 0              | -----          | 0               | 0                       | 3                     | 0                          |
| Grand Rapids.....         | 0                           | 0                           | 0              | -----          | 0               | 28                      | 0                     | 1                          |

## City reports for week ended July 18, 1931—Continued

| Division, State, and city        | Chicken<br>pox, cases<br>reported | Diphtheria                             |                   | Influenza         |                    | Measles,<br>cases re-<br>ported | Mumps,<br>cases re-<br>ported | Pneu-<br>monia,<br>deaths<br>reported |
|----------------------------------|-----------------------------------|--|-------------------|-------------------|--------------------|---------------------------------|-------------------------------|---------------------------------------|
|                                  |                                   | Cases,<br>estimated<br>expect-<br>ancy | Cases<br>reported | Cases<br>reported | Deaths<br>reported |                                 |                               |                                       |
| EAST NORTH CENTRAL<br>—continued |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Wisconsin:                       |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Kenosha.....                     | 1                                 | 1                                      | 0                 |                   | 0                  | 0                               | 17                            | 0                                     |
| Madison.....                     | 12                                | 0                                      | 0                 |                   |                    | 0                               | 18                            | 4                                     |
| Milwaukee.....                   | 33                                | 8                                      | 3                 | 1                 | 1                  | 118                             | 56                            | 2                                     |
| Racine.....                      |                                   | 1                                      |                   |                   |                    |                                 |                               |                                       |
| Superior.....                    | 1                                 | 0                                      | 0                 |                   | 0                  | 0                               | 0                             | 0                                     |
| WEST NORTH CENTRAL               |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Minnesota:                       |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Duluth.....                      | 0                                 | 0                                      | 0                 |                   | 1                  | 0                               | 0                             | 2                                     |
| Minneapolis.....                 | 12                                | 8                                      | 2                 |                   | 0                  | 12                              | 4                             | 4                                     |
| St. Paul.....                    | 4                                 | 5                                      | 0                 |                   | 0                  | 6                               | 1                             | 4                                     |
| Iowa:                            |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Davenport.....                   | 0                                 | 2                                      | 0                 |                   |                    | 0                               | 0                             |                                       |
| Des Moines.....                  | 0                                 | 2                                      | 0                 |                   |                    | 0                               | 0                             |                                       |
| Sioux City.....                  | 0                                 | 0                                      | 2                 |                   |                    | 0                               | 1                             |                                       |
| Waterloo.....                    | 0                                 | 0                                      | 0                 |                   |                    | 2                               | 2                             |                                       |
| Missouri:                        |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Kansas City.....                 | 0                                 | 1                                      | 2                 |                   | 0                  | 4                               | 1                             | 4                                     |
| St. Joseph.....                  | 0                                 | 0                                      | 1                 |                   | 0                  | 7                               | 0                             | 2                                     |
| St. Louis.....                   | 0                                 | 17                                     | 9                 |                   |                    | 0                               | 7                             | 4                                     |
| North Dakota:                    |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Fargo.....                       | 0                                 | 0                                      | 0                 |                   | 0                  | 1                               | 0                             | 0                                     |
| Grand Forks.....                 | 0                                 | 0                                      | 0                 |                   |                    | 0                               | 0                             |                                       |
| Nebraska:                        |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Omaha.....                       | 0                                 | 2                                      | 0                 |                   | 0                  | 0                               | 13                            | 2                                     |
| Kansas:                          |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Topeka.....                      | 1                                 | 1                                      | 0                 |                   | 0                  | 0                               | 21                            | 1                                     |
| Wichita.....                     | 5                                 | 0                                      | 0                 |                   | 0                  | 0                               | 0                             | 1                                     |
| SOUTH ATLANTIC                   |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Delaware:                        |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Wilmington.....                  | 0                                 | 0                                      | 0                 |                   | 0                  | 4                               | 0                             | 1                                     |
| Maryland:                        |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Baltimore.....                   | 8                                 | 10                                     | 5                 |                   | 0                  | 22                              | 9                             | 8                                     |
| Cumberland.....                  | 3                                 | 0                                      | 0                 |                   | 0                  | 0                               | 0                             | 1                                     |
| Frederick.....                   | 0                                 | 0                                      | 0                 |                   | 0                  | 0                               | 0                             | 0                                     |
| District of Columbia:            |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Washington.....                  | 4                                 | 5                                      | 5                 |                   | 0                  | 8                               | 0                             | 4                                     |
| Virginia:                        |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Lynchburg.....                   | 0                                 | 0                                      | 0                 |                   | 0                  | 1                               | 0                             | 0                                     |
| Norfolk.....                     | 0                                 | 0                                      | 1                 |                   | 0                  | 1                               | 0                             | 2                                     |
| Richmond.....                    | 0                                 | 1                                      | 0                 |                   | 1                  | 2                               | 0                             | 2                                     |
| Roanoke.....                     | 0                                 | 0                                      | 0                 |                   | 0                  | 1                               | 0                             | 0                                     |
| West Virginia:                   |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Charleston.....                  | 1                                 | 0                                      | 0                 |                   | 0                  | 0                               | 0                             | 1                                     |
| Wheeling.....                    | 0                                 | 0                                      | 0                 |                   | 0                  | 5                               | 0                             | 0                                     |
| North Carolina:                  |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Raleigh.....                     | 0                                 | 0                                      | 0                 |                   | 0                  | 3                               | 0                             | 0                                     |
| Wilmington.....                  | 0                                 | 0                                      | 0                 |                   | 0                  | 0                               | 0                             | 0                                     |
| Winston-Salem.....               | 2                                 | 0                                      | 0                 |                   | 0                  | 8                               | 8                             | 0                                     |
| South Carolina:                  |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Charleston.....                  | 0                                 | 0                                      | 0                 |                   | 0                  | 0                               | 0                             | 0                                     |
| Columbia.....                    | 0                                 | 0                                      | 0                 |                   | 1                  | 0                               | 0                             | 3                                     |
| Georgia:                         |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Atlanta.....                     | 0                                 | 1                                      | 0                 |                   | 0                  | 0                               | 0                             | 0                                     |
| Brunswick.....                   | 0                                 | 0                                      | 0                 |                   | 0                  | 0                               | 0                             | 0                                     |
| Savannah.....                    | 0                                 | 0                                      | 1                 | 3                 | 0                  | 0                               | 2                             | 0                                     |
| Florida:                         |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Miami.....                       | 1                                 | 0                                      | 3                 |                   | 0                  | 6                               | 0                             | 0                                     |
| Tampa.....                       | 0                                 | 0                                      | 1                 |                   | 0                  | 0                               | 0                             | 0                                     |
| EAST SOUTH CENTRAL               |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Kentucky:                        |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Covington.....                   | 0                                 | 0                                      | 0                 |                   | 0                  | 0                               | 0                             | 2                                     |
| Tennessee:                       |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Memphis.....                     | 0                                 | 1                                      | 1                 |                   | 0                  | 18                              | 2                             | 4                                     |
| Nashville.....                   | 0                                 | 0                                      | 0                 |                   | 0                  | 1                               | 1                             | 0                                     |
| Alabama:                         |                                   |  |                   |                   |                    |                                 |                               |                                       |
| Birmingham.....                  | 0                                 | 1                                      | 0                 | 2                 | 0                  | 0                               | 0                             | 1                                     |
| Mobile.....                      | 0                                 | 0                                      | 4                 |                   | 0                  | 0                               | 0                             | 0                                     |
| Montgomery.....                  | 1                                 | 0                                      | 0                 |                   |                    | 1                               | 0                             |                                       |

## City reports for week ended July 18, 1931—Continued

| Division, State, and city | Chicken pox, cases reported | Diphtheria                  |                | Influenza      |                 | Measles, cases reported | Mumps, cases reported | Pneumonia, deaths reported |
|---------------------------|-----------------------------|-----------------------------|----------------|----------------|-----------------|-------------------------|-----------------------|----------------------------|
|                           |                             | Cases, estimated expectancy | Cases reported | Cases reported | Deaths reported |                         |                       |                            |
| WEST SOUTH CENTRAL        |                             |                             |                |                |                 |                         |                       |                            |
| Arkansas:                 |                             |                             |                |                |                 |                         |                       |                            |
| Fort Smith.....           | 0                           | 0                           | 0              | -----          | -----           | 0                       | 0                     | -----                      |
| Little Rock.....          | 0                           | 0                           | 0              | -----          | 0               | 2                       | 0                     | -----                      |
| Louisiana:                |                             |                             |                |                |                 |                         |                       |                            |
| New Orleans.....          | 0                           | 5                           | 6              | -----          | 0               | 0                       | 0                     | 6                          |
| Shreveport.....           | 0                           | 0                           | 0              | -----          | 0               | 1                       | 0                     | 1                          |
| Oklahoma:                 |                             |                             |                |                |                 |                         |                       |                            |
| Muskogee.....             | 0                           | 1                           | 0              | -----          | 0               | 0                       | 0                     | 0                          |
| Oklahoma City..           | 0                           | 1                           | 1              | -----          | 0               | 0                       | 1                     | 3                          |
| Texas:                    |                             |                             |                |                |                 |                         |                       |                            |
| Dallas.....               | 0                           | 2                           | 4              | -----          | 0               | 0                       | 0                     | 0                          |
| Fort Worth.....           | 1                           | 0                           | 0              | -----          | 0               | 1                       | 0                     | 2                          |
| Galveston.....            | 0                           | 0                           | 0              | -----          | 0               | 0                       | 0                     | 1                          |
| Houston.....              | 0                           | 2                           | 3              | -----          | 0               | 2                       | 1                     | 3                          |
| San Antonio.....          | 0                           | 1                           | 1              | -----          | 1               | 0                       | 0                     | 2                          |
| MOUNTAIN                  |                             |                             |                |                |                 |                         |                       |                            |
| Montana:                  |                             |                             |                |                |                 |                         |                       |                            |
| Billings.....             | 2                           | 0                           | 0              | -----          | 0               | 7                       | 0                     | 0                          |
| Great Falls.....          | 5                           | 0                           | 0              | -----          | 0               | 0                       | 0                     | 0                          |
| Helena.....               | 0                           | 0                           | 0              | -----          | 0               | 0                       | 0                     | 0                          |
| Missoula.....             | 0                           | 0                           | 0              | -----          | 0               | 0                       | 0                     | 1                          |
| Idaho:                    |                             |                             |                |                |                 |                         |                       |                            |
| Boise.....                | 0                           | 0                           | 0              | -----          | 0               | 2                       | 0                     | 1                          |
| Colorado:                 |                             |                             |                |                |                 |                         |                       |                            |
| Denver.....               | 3                           | 7                           | 7              | -----          | 0               | 4                       | 10                    | 2                          |
| Pueblo.....               | 2                           | 0                           | 0              | -----          | 0               | 0                       | 0                     | 0                          |
| New Mexico:               |                             |                             |                |                |                 |                         |                       |                            |
| Albuquerque.....          | 0                           | 0                           | 0              | -----          | 0               | 1                       | 0                     | 0                          |
| Arizona:                  |                             |                             |                |                |                 |                         |                       |                            |
| Phoenix.....              | 0                           | 0                           | 0              | -----          | 0               | 0                       | 0                     | 0                          |
| Utah:                     |                             |                             |                |                |                 |                         |                       |                            |
| Salt Lake City..          | 4                           | 2                           | 0              | -----          | 0               | 1                       | 7                     | 0                          |
| Nevada:                   |                             |                             |                |                |                 |                         |                       |                            |
| Reno.....                 | 0                           | 0                           | 0              | -----          | 0               | 0                       | 0                     | 0                          |
| PACIFIC                   |                             |                             |                |                |                 |                         |                       |                            |
| Washington:               |                             |                             |                |                |                 |                         |                       |                            |
| Seattle.....              | 21                          | 2                           | 0              | -----          | -----           | 3                       | 5                     | -----                      |
| Spokane.....              | 2                           | 1                           | 1              | -----          | -----           | 2                       | 0                     | -----                      |
| Tacoma.....               | 3                           | 2                           | 0              | -----          | 0               | 0                       | 1                     | 1                          |
| Oregon:                   |                             |                             |                |                |                 |                         |                       |                            |
| Portland.....             | 4                           | 6                           | 0              | -----          | 0               | 1                       | 7                     | 0                          |
| Salem.....                | 2                           | 0                           | 2              | -----          | 0               | 0                       | 7                     | 0                          |
| California:               |                             |                             |                |                |                 |                         |                       |                            |
| Los Angeles.....          | 14                          | 23                          | 21             | 4              | 0               | 24                      | 8                     | 5                          |
| Sacramento.....           | 1                           | 2                           | 1              | -----          | 0               | 15                      | 1                     | 0                          |
| San Francisco.....        | 9                           | 8                           | 3              | -----          | 0               | 19                      | 2                     | 4                          |

## City reports for week ended July 18, 1931—Continued

| Division, State, and city | Scarlet fever                          |                        | Smallpox                               |                        |                         | Tuber-<br>culo-<br>sis,<br>deaths<br>reported | Typhoid fever                          |                        |                         | Whoop-<br>ing<br>cough,<br>cases<br>re-<br>ported | Deaths<br>all<br>causes |
|---------------------------|--|------------------------|--|------------------------|-------------------------|---|--|------------------------|-------------------------|---|-------------------------|
|                           | Cases,<br>estimated<br>expect-<br>ancy | Cases<br>re-<br>ported | Cases,<br>estimated<br>expect-<br>ancy | Cases<br>re-<br>ported | Deaths<br>re-<br>ported |   | Cases,<br>estimated<br>expect-<br>ancy | Cases<br>re-<br>ported | Deaths<br>re-<br>ported |   |                         |
| NEW ENGLAND               |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| Maine:                    |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| Portland.....             | 1                                      | 0                      | 0                                      | 0                      | 0                       | 0   | 0                                      | 0                      | 0                       | 0   | 17                      |
| New Hampshire:            |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| Concord.....              | 0                                      | 0                      | 0                                      | 0                      | 0                       | 0   | 0                                      | 0                      | 0                       | 0   | 8                       |
| Nashua.....               | 0                                      | 0                      | 0                                      | 0                      | 0                       | 0   | 0                                      | 0                      | 0                       | 0   | 0                       |
| Vermont:                  |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| Barre.....                | 0                                      | 0                      | 0                                      | 0                      | 0                       | 1   | 0                                      | 0                      | 0                       | 4   | 2                       |
| Burlington.....           | 0                                      | 0                      | 1                                      | 4                      | 0                       | 0   | 0                                      | 0                      | 0                       | 4   | 8                       |
| Massachusetts:            |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| Boston.....               | 26                                     | 20                     | 0                                      | 0                      | 0                       | 7   | 2                                      | 3                      | 0                       | 29  | 176                     |
| Fall River.....           | 1                                      | 5                      | 0                                      | 0                      | 0                       | 1   | 1                                      | 1                      | 0                       | 0   | 12                      |
| Springfield.....          | 2                                      | 10                     | 0                                      | 0                      | 0                       | 0   | 0                                      | 0                      | 0                       | 1   | 24                      |
| Worcester.....            | 3                                      | 23                     | 0                                      | 0                      | 0                       | 4   | 1                                      | 1                      | 0                       | 14  | 28                      |
| Rhode Island:             |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| Pawtucket.....            | 0                                      | 0                      | 0                                      | 0                      | 0                       | 0   | 0                                      | 0                      | 0                       | 0   | 8                       |
| Providence.....           | 3                                      | 2                      | 0                                      | 0                      | 0                       | 1   | 0                                      | 0                      | 0                       | 2   | 42                      |
| Connecticut:              |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| Bridgeport.....           | 2                                      | 0                      | 0                                      | 0                      | 0                       | 0   | 0                                      | 0                      | 0                       | 3   | 20                      |
| Hartford.....             | 1                                      | 1                      | 0                                      | 0                      | 0                       | 1   | 0                                      | 0                      | 0                       | 7   | 34                      |
| New Haven.....            | 0                                      | 1                      | 0                                      | 0                      | 0                       | 0   | 0                                      | 0                      | 0                       | 3   | 36                      |
| MIDDLE ATLANTIC           |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| New York:                 |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| Buffalo.....              | 10                                     | 21                     | 0                                      | 0                      | 0                       | 6   | 0                                      | 0                      | 0                       | 27  | 125                     |
| New York.....             | 57                                     | 44                     | 1                                      | 0                      | 0                       | 103   | 15                                     | 10                     | 0                       | 241   | 1,273                   |
| Rochester.....            | 3                                      | 7                      | 0                                      | 0                      | 0                       | 2   | 1                                      | 0                      | 0                       | 4   | 60                      |
| Syracuse.....             | 3                                      | 7                      | 0                                      | 0                      | 0                       | 0   | 0                                      | 0                      | 0                       | 34  | 37                      |
| New Jersey:               |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| Camden.....               | 0                                      | 2                      | 0                                      | 0                      | 0                       | 2   | 0                                      | 1                      | 2                       | 4   | 31                      |
| Newark.....               | 7                                      | 0                      | 0                                      | 0                      | 0                       | 0   | 1                                      | 0                      | 0                       | 0   | 0                       |
| Trenton.....              | 1                                      | 4                      | 0                                      | 0                      | 0                       | 3   | 0                                      | 1                      | 0                       | 5   | 30                      |
| Pennsylvania:             |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| Philadelphia.....         | 30                                     | 32                     | 0                                      | 0                      | 0                       | 30  | 4                                      | 4                      | 1                       | 68  | 392                     |
| Pittsburgh.....           | 13                                     | 23                     | 0                                      | 1                      | 0                       | 10  | 2                                      | 0                      | 0                       | 36  | 154                     |
| Reading.....              | 1                                      | 0                      | 0                                      | 0                      | 0                       | 2   | 0                                      | 0                      | 0                       | 2   | 24                      |
| EAST NORTH CENTRAL        |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| Ohio:                     |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| Cincinnati.....           | 5                                      | 5                      | 1                                      | 0                      | 0                       | 14  | 1                                      | 0                      | 0                       | 7   | 144                     |
| Cleveland.....            | 16                                     | 14                     | 0                                      | 0                      | 0                       | 17  | 1                                      | 2                      | 0                       | 69  | 170                     |
| Columbus.....             | 2                                      | 1                      | 0                                      | 1                      | 0                       | 5   | 1                                      | 0                      | 0                       | 0   | 60                      |
| Toledo.....               | 4                                      | 5                      | 3                                      | 0                      | 0                       | 3   | 0                                      | 2                      | 0                       | 30  | 64                      |
| Indiana:                  |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| Fort Wayne.....           | 0                                      | 1                      | 1                                      | 0                      | 0                       | 1   | 0                                      | 1                      | 0                       | 0   | 26                      |
| Indianapolis.....         | 3                                      | 3                      | 3                                      | 2                      | 0                       | 9   | 1                                      | 0                      | 0                       | 53  | 0                       |
| South Bend.....           | 0                                      | 1                      | 0                                      | 0                      | 0                       | 0   | 1                                      | 0                      | 0                       | 0   | 13                      |
| Terre Haute.....          | 1                                      | 0                      | 0                                      | 0                      | 0                       | 3   | 0                                      | 0                      | 0                       | 1   | 21                      |
| Illinois:                 |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| Chicago.....              | 49                                     | 77                     | 2                                      | 0                      | 0                       | 42  | 3                                      | 4                      | 0                       | 121   | 638                     |
| Springfield.....          | 1                                      | 1                      | 0                                      | 0                      | 0                       | 0   | 0                                      | 0                      | 0                       | 4   | 25                      |
| Michigan:                 |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| Detroit.....              | 37                                     | 44                     | 1                                      | 2                      | 0                       | 22  | 3                                      | 0                      | 0                       | 184   | 224                     |
| Flint.....                | 5                                      | 9                      | 0                                      | 0                      | 0                       | 0   | 0                                      | 1                      | 0                       | 0   | 17                      |
| Grand Rapids.....         | 4                                      | 1                      | 0                                      | 0                      | 0                       | 0   | 0                                      | 0                      | 0                       | 14  | 26                      |
| Wisconsin:                |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| Kenosha.....              | 1                                      | 0                      | 0                                      | 0                      | 0                       | 1   | 0                                      | 0                      | 0                       | 2   | 8                       |
| Madison.....              | 1                                      | 0                      | 0                                      | 1                      | 0                       | 0   | 0                                      | 0                      | 0                       | 1   | 0                       |
| Milwaukee.....            | 9                                      | 13                     | 0                                      | 0                      | 0                       | 4   | 0                                      | 1                      | 0                       | 70  | 98                      |
| Racine.....               | 2                                      | 0                      | 0                                      | 0                      | 0                       | 0   | 0                                      | 0                      | 0                       | 0   | 0                       |
| Superior.....             | 1                                      | 1                      | 1                                      | 1                      | 0                       | 1   | 0                                      | 0                      | 0                       | 3   | 12                      |
| WEST NORTH CENTRAL        |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| Minnesota:                |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| Duluth.....               | 4                                      | 0                      | 0                                      | 0                      | 0                       | 1   | 0                                      | 0                      | 0                       | 0   | 22                      |
| Minneapolis.....          | 13                                     | 5                      | 0                                      | 0                      | 0                       | 0   | 0                                      | 0                      | 0                       | 6   | 115                     |
| St. Paul.....             | 8                                      | 3                      | 0                                      | 1                      | 0                       | 2   | 0                                      | 1                      | 0                       | 20  | 61                      |
| Iowa:                     |  |                        |  |                        |                         |   |  |                        |                         |   |                         |
| Davenport.....            | 0                                      | 1                      | 0                                      | 3                      | 0                       | 0   | 0                                      | 0                      | 0                       | 0   | 0                       |
| Des Moines.....           | 2                                      | 1                      | 0                                      | 0                      | 0                       | 0   | 0                                      | 0                      | 0                       | 0   | 30                      |
| Sioux City.....           | 1                                      | 2                      | 1                                      | 0                      | 0                       | 0   | 0                                      | 0                      | 0                       | 10  | 0                       |
| Waterloo.....             | 0                                      | 0                      | 0                                      | 0                      | 0                       | 0   | 0                                      | 0                      | 0                       | 1   | 0                       |



## City reports for week ended July 18, 1931—Continued

| Division, State,<br>and city | Scarlet fever                               |                        | Smallpox                                    |                        |                         | Tuber-<br>culosis,<br>deaths<br>re-<br>ported | Typhoid fever                               |                        |                         | Whoop-<br>ing<br>cough,<br>cases<br>re-<br>ported | Deaths<br>all<br>causes |
|------------------------------|---|------------------------|---|------------------------|-------------------------|---|---|------------------------|-------------------------|---|-------------------------|
|                              | Cases,<br>esti-<br>mated<br>expect-<br>ancy | Cases<br>re-<br>ported | Cases,<br>esti-<br>mated<br>expect-<br>ancy | Cases<br>re-<br>ported | Deaths<br>re-<br>ported |   | Cases,<br>esti-<br>mated<br>expect-<br>ancy | Cases<br>re-<br>ported | Deaths<br>re-<br>ported |   |                         |
| WEST NORTH<br>CENTRAL—CON.   |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Missouri:                    |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Kansas City.....             | 3   | 0                      | 0   | 0                      | 0                       | 5   | 1   | 0                      | 1                       | 11  | 94                      |
| St. Joseph.....              | 0   | 1                      | 0   | 0                      | 0                       | 0   | 0   | 0                      | 0                       | 0   | 39                      |
| St. Louis.....               | 9   | 9                      | 0   | 0                      | 0                       | 15  | 3   | 0                      | 1                       | 87  | 220                     |
| North Dakota:                |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Fargo.....                   | 0   | 0                      | 0   | 0                      | 0                       | 0   | 0   | 0                      | 0                       | 4   | 9                       |
| Grand Forks.....             | 1   | 0                      | 0   | 0                      |                         |   | 0   | 0                      |                         | 0   |                         |
| Nebraska:                    |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Omaha.....                   | 1   | 2                      | 1   | 1                      | 0                       | 1   | 0   | 0                      | 0                       | 1   | 41                      |
| Kansas:                      |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Topeka.....                  | 0   | 0                      | 0   | 0                      | 0                       | 0   | 0   | 0                      | 0                       | 11  | 14                      |
| Wichita.....                 | 1   | 0                      | 1   | 0                      | 0                       | 0   | 0   | 0                      | 0                       | 6   | 27                      |
| SOUTH ATLANTIC               |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Delaware:                    |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Wilmington.....              | 1   | 2                      | 0   | 0                      | 0                       | 1   | 0   | 0                      | 0                       | 3   | 13                      |
| Maryland:                    |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Baltimore.....               | 10  | 3                      | 0   | 0                      | 0                       | 11  | 4   | 3                      | 0                       | 91  | 177                     |
| Cumberland.....              | 0   | 0                      | 0   | 0                      | 0                       | 0   | 0   | 0                      | 0                       | 0   | 14                      |
| Frederick.....               | 0   | 0                      | 0   | 0                      | 0                       | 1   | 0   | 0                      | 0                       | 0   | 4                       |
| District of Col.:            |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Washington.....              | 6   | 5                      | 0   | 0                      | 0                       | 15  | 2   | 0                      | 0                       | 52  | 124                     |
| Virginia:                    |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Lynchburg.....               | 1   | 0                      | 0   | 0                      | 0                       | 0   | 0   | 2                      | 0                       | 3   | 17                      |
| Norfolk.....                 | 1   | 0                      | 0   | 0                      | 0                       | 0   | 1   | 1                      | 0                       | 0   |                         |
| Richmond.....                | 1   | 1                      | 0   | 0                      | 0                       | 2   | 1   | 1                      | 0                       | 0   | 56                      |
| Roanoke.....                 | 0   | 1                      | 0   | 0                      | 0                       | 4   | 0   | 0                      | 0                       | 6   | 16                      |
| West Virginia:               |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Charleston.....              | 0   | 0                      | 0   | 0                      | 0                       | 0   | 1   | 0                      | 0                       | 27  | 17                      |
| Wheeling.....                | 1   | 0                      | 0   | 0                      | 0                       | 1   | 0   | 3                      | 0                       | 9   | 20                      |
| North Carolina:              |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Raleigh.....                 | 0   | 0                      | 0   | 0                      | 0                       | 2   | 0   | 0                      | 0                       | 4   | 9                       |
| Wilmington.....              | 0   | 0                      | 0   | 0                      | 0                       | 1   | 0   | 0                      | 0                       | 6   | 12                      |
| Winston-Salem.....           | 0   | 0                      | 0   | 0                      | 0                       | 1   | 0   | 1                      | 0                       | 5   | 13                      |
| South Carolina:              |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Charleston.....              | 0   | 1                      | 0   | 0                      | 0                       | 2   | 1   | 2                      | 0                       | 1   | 28                      |
| Columbia.....                | 0   | 0                      | 0   | 0                      | 0                       | 2   | 0   | 0                      | 3                       | 1   | 33                      |
| Georgia:                     |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Atlanta.....                 | 2   | 4                      | 0   | 0                      | 0                       | 8   | 2   | 6                      | 2                       | 2   | 63                      |
| Brunswick.....               | 0   | 0                      | 0   | 0                      | 0                       | 0   | 0   | 0                      | 0                       | 0   | 3                       |
| Savannah.....                | 0   | 0                      | 0   | 0                      | 0                       | 2   | 0   | 5                      | 1                       | 0   | 29                      |
| Florida:                     |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Miami.....                   | 0   | 1                      | 1   | 0                      | 0                       | 1   | 0   | 0                      | 0                       | 1   | 19                      |
| Tampa.....                   | 0   | 0                      | 0   | 0                      | 0                       | 4   | 0   | 1                      | 0                       | 4   | 22                      |
| EAST SOUTH<br>CENTRAL        |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Kentucky:                    |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Covington.....               | 0   | 2                      | 0   | 0                      | 0                       | 1   | 0   | 0                      | 0                       | 0   | 25                      |
| Tennessee:                   |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Memphis.....                 | 2   | 0                      | 0   | 0                      | 0                       | 7   | 7   | 2                      | 0                       | 26  | 79                      |
| Nashville.....               | 0   | 2                      | 0   | 0                      | 0                       | 2   | 5   | 4                      | 1                       | 6   | 43                      |
| Alabama:                     |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Birmingham.....              | 2   | 0                      | 1   | 0                      | 0                       | 2   | 3   | 0                      | 2                       | 6   | 61                      |
| Mobile.....                  | 0   | 0                      | 0   | 0                      | 0                       | 0   | 0   | 0                      | 0                       | 0   | 17                      |
| Montgomery.....              | 0   | 0                      | 0   | 0                      |                         |   | 0   | 0                      |                         | 0   |                         |
| WEST SOUTH<br>CENTRAL        |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Arkansas:                    |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Fort Smith.....              | 0   | 0                      | 0   | 0                      |                         |   | 0   | 0                      |                         | 1   |                         |
| Little Rock.....             | 0   | 0                      | 0   | 0                      | 0                       | 1   | 2   | 2                      | 0                       | 0   |                         |
| Louisiana:                   |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| New Orleans.....             | 3   | 5                      | 0   | 0                      | 0                       | 7   | 4   | 1                      | 0                       | 2   | 137                     |
| Shreveport.....              | 0   | 0                      | 0   | 0                      | 0                       | 2   | 1   | 2                      | 1                       | 5   | 34                      |
| Oklahoma:                    |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Muskogee.....                | 0   | 0                      | 0   | 0                      | 0                       | 0   | 0   | 2                      | 1                       | 0   |                         |
| Oklahoma City.....           | 2   | 3                      | 0   | 0                      | 0                       | 1   | 2   | 6                      | 1                       | 0   | 48                      |
| Texas:                       |   |                        |   |                        |                         |   |   |                        |                         |   |                         |
| Dallas.....                  | 2   | 3                      | 1   | 1                      | 0                       | 4   | 2   | 10                     | 1                       | 15  | 50                      |
| Fort Worth.....              | 1   | 1                      | 1   | 0                      | 0                       | 0   | 1   | 0                      | 1                       | 1   | 41                      |
| Galveston.....               | 0   | 0                      | 0   | 0                      | 0                       | 0   | 0   | 0                      | 0                       | 0   | 14                      |
| Houston.....                 | 1   | 0                      | 1   | 1                      | 0                       | 6   | 1   | 1                      | 0                       | 0   | 68                      |
| San Antonio.....             | 1   | 2                      | 0   | 0                      | 0                       | 6   | 1   | 1                      | 0                       | 2   | 47                      |



## City reports for week ended July 18, 1931—Continued

| Division, State, and city             | Meningococcus meningitis |        | Lethargic encephalitis |        | Pellagra |        | Polioomyelitis (infantile paralysis) |       |        |
|---------------------------------------|--------------------------|--------|------------------------|--------|----------|--------|--------------------------------------|-------|--------|
|                                       | Cases                    | Deaths | Cases                  | Deaths | Cases    | Deaths | Cases, estimated expectancy          | Cases | Deaths |
| <b>EAST NORTH CENTRAL—CON.</b>        |                          |        |                        |        |          |        |                                      |       |        |
| Wisconsin:                            |                          |        |                        |        |          |        |                                      |       |        |
| Madison.....                          | 0                        | 0      | 0                      | 0      | 0        | 0      | 0                                    | 3     | 0      |
| Milwaukee.....                        | 0                        | 1      | 0                      | 0      | 0        | 0      | 0                                    | 1     | 0      |
| <b>WEST NORTH CENTRAL<sup>1</sup></b> |                          |        |                        |        |          |        |                                      |       |        |
| Missouri:                             |                          |        |                        |        |          |        |                                      |       |        |
| St. Joseph.....                       | 1                        | 1      | 0                      | 0      | 0        | 0      | 0                                    | 0     | 0      |
| St. Louis.....                        | 3                        | 0      | 1                      | 1      | 0        | 0      | 0                                    | 0     | 0      |
| <b>SOUTH ATLANTIC</b>                 |                          |        |                        |        |          |        |                                      |       |        |
| Maryland:                             |                          |        |                        |        |          |        |                                      |       |        |
| Baltimore.....                        | 3                        | 1      | 0                      | 1      | 0        | 0      | 1                                    | 0     | 0      |
| District of Columbia:                 |                          |        |                        |        |          |        |                                      |       |        |
| Washington.....                       | 0                        | 1      | 0                      | 0      | 0        | 0      | 0                                    | 0     | 0      |
| South Carolina:                       |                          |        |                        |        |          |        |                                      |       |        |
| Charleston.....                       | 0                        | 0      | 0                      | 0      | 1        | 1      | 0                                    | 0     | 0      |
| Columbia.....                         | 0                        | 0      | 0                      | 0      | 0        | 1      | 0                                    | 0     | 0      |
| Georgia:                              |                          |        |                        |        |          |        |                                      |       |        |
| Atlanta <sup>2</sup> .....            | 0                        | 0      | 0                      | 0      | 1        | 0      | 0                                    | 0     | 0      |
| Savannah <sup>1</sup> .....           | 0                        | 0      | 0                      | 0      | 7        | 0      | 0                                    | 0     | 0      |
| Florida:                              |                          |        |                        |        |          |        |                                      |       |        |
| Miami <sup>1</sup> .....              | 0                        | 0      | 0                      | 0      | 2        | 0      | 0                                    | 0     | 0      |
| <b>EAST SOUTH CENTRAL</b>             |                          |        |                        |        |          |        |                                      |       |        |
| Alabama:                              |                          |        |                        |        |          |        |                                      |       |        |
| Birmingham.....                       | 0                        | 1      | 1                      | 1      | 2        | 1      | 0                                    | 0     | 0      |
| Montgomery.....                       | 1                        | 0      | 0                      | 0      | 1        | 0      | 0                                    | 0     | 0      |
| <b>WEST SOUTH CENTRAL</b>             |                          |        |                        |        |          |        |                                      |       |        |
| Louisiana:                            |                          |        |                        |        |          |        |                                      |       |        |
| New Orleans.....                      | 2                        | 1      | 0                      | 0      | 0        | 0      | 0                                    | 0     | 0      |
| Shreveport.....                       | 0                        | 0      | 0                      | 0      | 0        | 1      | 0                                    | 0     | 0      |
| Texas:                                |                          |        |                        |        |          |        |                                      |       |        |
| Fort Worth.....                       | 1                        | 0      | 0                      | 0      | 0        | 0      | 0                                    | 1     | 0      |
| Galveston.....                        | 0                        | 0      | 0                      | 0      | 0        | 1      | 0                                    | 0     | 0      |
| Houston.....                          | 0                        | 0      | 0                      | 0      | 0        | 1      | 0                                    | 0     | 0      |
| <b>MOUNTAIN</b>                       |                          |        |                        |        |          |        |                                      |       |        |
| Montana:                              |                          |        |                        |        |          |        |                                      |       |        |
| Great Falls.....                      | 0                        | 0      | 0                      | 0      | 0        | 0      | 0                                    | 1     | 0      |
| <b>PACIFIC</b>                        |                          |        |                        |        |          |        |                                      |       |        |
| Washington:                           |                          |        |                        |        |          |        |                                      |       |        |
| Spokane.....                          | 1                        | 0      | 0                      | 0      | 0        | 0      | 0                                    | 0     | 0      |
| California:                           |                          |        |                        |        |          |        |                                      |       |        |
| Los Angeles.....                      | 0                        | 0      | 0                      | 0      | 0        | 0      | 1                                    | 1     | 0      |
| San Francisco.....                    | 0                        | 0      | 0                      | 0      | 1        | 0      | 0                                    | 0     | 1      |

<sup>1</sup> Typhus fever: 5 cases; 1 case at Minneapolis, Minn.; 3 cases at Savannah, Ga.; and 1 case at Miami, Fla.<sup>2</sup> Dengue: 1 case at Atlanta, Ga.

The following tables give the rates per 100,000 population for 98 cities for the 5-week period ended July 18, 1931, compared with those for a like period ended July 19, 1930. The population figures used in computing the rates are estimated midyear populations for 1930 and 1931, respectively, derived from the 1930 census. The 98 cities reporting cases have an estimated aggregate population of more than 33,000,000. The 91 cities reporting deaths have more than 31,500,000 estimated population.

Summary of weekly reports from cities, June 14 to July 18, 1931.—Annual rates per 100,000 population, compared with rates for the corresponding period of 1930<sup>1</sup>

## DIPHTHERIA CASE RATES

|                         | Week ended—   |               |               |               |              |              |               |               |               |               |
|-------------------------|---------------|---------------|---------------|---------------|--------------|--------------|---------------|---------------|---------------|---------------|
|                         | June 20, 1931 | June 21, 1930 | June 27, 1931 | June 28, 1930 | July 4, 1931 | July 5, 1930 | July 11, 1931 | July 12, 1930 | July 18, 1931 | July 19, 1930 |
| 98 cities.....          | 66            | 66            | 54            | 65            | * 47         | 57           | 43            | 58            | * 42          | 48            |
| New England.....        | 41            | 39            | 67            | 68            | 96           | 56           | 60            | 41            | 65            | 36            |
| Middle Atlantic.....    | 65            | 77            | 47            | 62            | 53           | 56           | 50            | 49            | * 37          | 46            |
| East North Central..... | 89            | 92            | 72            | 97            | * 51         | 91           | 41            | 86            | * 50          | 66            |
| West North Central..... | 52            | 35            | 42            | 72            | 33           | 37           | 31            | 68            | 31            | 39            |
| South Atlantic.....     | 43            | 36            | 45            | 26            | * 12         | 26           | 18            | 32            | 24            | 46            |
| East South Central..... | 6             | 12            | 23            | 12            | 12           | 36           | 23            | 24            | 29            | 12            |
| West South Central..... | 85            | 80            | 68            | 35            | 27           | 49           | 61            | 59            | 47            | 35            |
| Mountain.....           | 26            | 9             | 9             | 0             | * 9          | 9            | 17            | 26            | 61            | 70            |
| Pacific.....            | 71            | 47            | 51            | 54            | 51           | 32           | 41            | 53            | 51            | 32            |

## MEASLES CASE RATES

|                         | 723   | 642   | 568 | 489   | * 347 | 270 | 316 | 252 | * 183 | 147 |
|-------------------------|-------|-------|-----|-------|-------|-----|-----|-----|-------|-----|
| 98 cities.....          |       |       |     |       |       |     |     |     |       |     |
| New England.....        | 635   | 1,144 | 438 | 832   | 402   | 544 | 351 | 460 | 317   | 258 |
| Middle Atlantic.....    | 663   | 776   | 511 | 607   | 283   | 322 | 311 | 305 | * 148 | 195 |
| East North Central..... | 1,178 | 377   | 921 | 331   | * 643 | 168 | 627 | 154 | * 319 | 70  |
| West North Central..... | 331   | 302   | 296 | 269   | 143   | 139 | 103 | 130 | 61    | 50  |
| South Atlantic.....     | 766   | 411   | 591 | 256   | * 310 | 180 | 259 | 142 | 107   | 122 |
| East South Central..... | 844   | 239   | 588 | 227   | 349   | 126 | 116 | 179 | 116   | 42  |
| West South Central..... | 88    | 77    | 47  | 17    | 24    | 24  | 27  | 17  | 17    | 10  |
| Mountain.....           | 609   | 2,687 | 479 | 1,454 | * 215 | 731 | 122 | 582 | 122   | 247 |
| Pacific.....            | 302   | 1,069 | 362 | 798   | 149   | 451 | 182 | 482 | 123   | 810 |

## SCARLET FEVER CASE RATES

|                         | 221 | 141 | 168 | 107 | * 104 | 75  | 79  | 71  | * 60  | 53 |
|-------------------------|-----|-----|-----|-----|-------|-----|-----|-----|-------|----|
| 98 cities.....          |     |     |     |     |       |     |     |     |       |    |
| New England.....        | 272 | 126 | 238 | 135 | 188   | 73  | 142 | 73  | 149   | 65 |
| Middle Atlantic.....    | 280 | 112 | 194 | 85  | 135   | 54  | 89  | 49  | * 65  | 35 |
| East North Central..... | 310 | 226 | 240 | 182 | * 121 | 115 | 90  | 114 | * 105 | 86 |
| West North Central..... | 132 | 151 | 78  | 99  | 31    | 105 | 44  | 85  | 42    | 43 |
| South Atlantic.....     | 77  | 106 | 93  | 68  | * 54  | 62  | 49  | 68  | 34    | 48 |
| East South Central..... | 93  | 60  | 64  | 54  | 47    | 12  | 52  | 42  | 23    | 18 |
| West South Central..... | 30  | 98  | 30  | 38  | 41    | 45  | 34  | 35  | 34    | 21 |
| Mountain.....           | 78  | 203 | 96  | 62  | * 36  | 167 | 52  | 88  | 26    | 79 |
| Pacific.....            | 57  | 73  | 57  | 49  | 47    | 38  | 49  | 43  | 12    | 49 |

## SMALLPOX CASE RATES

|                         | 7  | 10 | 8  | 13 | * 6 | 6  | 2  | 7  | * 3 | 6  |
|-------------------------|----|----|----|----|-----|----|----|----|-----|----|
| 98 cities.....          |    |    |    |    |     |    |    |    |     |    |
| New England.....        | 5  | 0  | 0  | 0  | 0   | 0  | 2  | 0  | 0   | 0  |
| Middle Atlantic.....    | 0  | 0  | 1  | 0  | 0   | 0  | 0  | 0  | * 0 | 0  |
| East North Central..... | 5  | 7  | 5  | 10 | * 8 | 5  | 1  | 9  | * 4 | 10 |
| West North Central..... | 29 | 31 | 19 | 52 | 10  | 14 | 4  | 10 | 4   | 14 |
| South Atlantic.....     | 14 | 2  | 12 | 10 | * 0 | 2  | 4  | 0  | 0   | 0  |
| East South Central..... | 12 | 18 | 17 | 6  | 23  | 18 | 6  | 18 | 0   | 0  |
| West South Central..... | 20 | 24 | 30 | 21 | 24  | 0  | 10 | 7  | 7   | 7  |
| Mountain.....           | 0  | 35 | 70 | 53 | * 0 | 53 | 0  | 9  | 0   | 18 |
| Pacific.....            | 16 | 36 | 6  | 43 | 14  | 32 | 8  | 36 | 22  | 18 |

<sup>1</sup> The figures given in this table are rates per 100,000 population, annual basis, and not the number of cases reported. Populations used are estimated as of July 1, 1931 and 1930, respectively.

\* Milwaukee, Wis.; Columbia, S. C.; and Billings, Mont., not included.

\* Newark, N. J., and Racine, Wis., not included.

\* Newark, N. J., not included.

\* Milwaukee, Wis., not included.

\* Racine, Wis., not included.

\* Columbia, S. C., not included.

\* Billings, Mont., not included.

Summary of weekly reports from cities, June 14 to July 18, 1931.—Annual rates per 100,000 population, compared with rates for the corresponding period of 1930—Continued

## TYPHOID FEVER CASE RATES

|                         | Week ended—   |               |               |               |                 |              |               |               |                 |               |
|-------------------------|---------------|---------------|---------------|---------------|-----------------|--------------|---------------|---------------|-----------------|---------------|
|                         | June 20, 1931 | June 21, 1930 | June 27, 1931 | June 28, 1930 | July 4, 1931    | July 5, 1930 | July 11, 1931 | July 12, 1930 | July 18, 1931   | July 19, 1930 |
| 98 cities.....          | 9             | 8             | 10            | 13            | <sup>1</sup> 10 | 10           | 14            | 16            | <sup>1</sup> 13 | 16            |
| New England.....        | 10            | 0             | 0             | 10            | 10              | 7            | 2             | 5             | 12              | 10            |
| Middle Atlantic.....    | 12            | 4             | 4             | 5             | 5               | 5            | 8             | 10            | <sup>4</sup> 7  | 4             |
| East North Central..... | 4             | 2             | 6             | 10            | <sup>3</sup> 3  | 1            | 5             | 6             | <sup>6</sup> 6  | 9             |
| West North Central..... | 6             | 8             | 10            | 14            | 10              | 8            | 19            | 10            | 2               | 23            |
| South Atlantic.....     | 14            | 24            | 16            | 40            | <sup>7</sup> 10 | 28           | 28            | 60            | 47              | 44            |
| East South Central..... | 12            | 48            | 35            | 60            | 41              | 84           | 58            | 84            | 35              | 60            |
| West South Central..... | 14            | 24            | 54            | 31            | 71              | 45           | 81            | 35            | 57              | 59            |
| Mountain.....           | 0             | 9             | 52            | 35            | <sup>1</sup> 36 | 0            | 35            | 0             | 26              | 26            |
| Pacific.....            | 10            | 6             | 14            | 4             | 4               | 4            | 6             | 14            | 6               | 16            |

## INFLUENZA DEATH RATES

| 91 cities.....          | 7  | 4  | 4 | 3  | <sup>1</sup> 3 | 4  | 3 | 3  | <sup>1</sup> 2 | 2  |
|-------------------------|----|----|---|----|----------------|----|---|----|----------------|----|
| New England.....        | 7  | 2  | 2 | 0  | 0              | 2  | 2 | 0  | 0              | 0  |
| Middle Atlantic.....    | 8  | 5  | 2 | 2  | 1              | 4  | 4 | 4  | <sup>4</sup> 0 | 3  |
| East North Central..... | 5  | 4  | 6 | 2  | <sup>1</sup> 1 | 2  | 2 | 3  | <sup>4</sup> 4 | 2  |
| West North Central..... | 6  | 0  | 0 | 0  | 9              | 0  | 0 | 6  | 3              | 0  |
| South Atlantic.....     | 4  | 2  | 6 | 6  | <sup>7</sup> 4 | 6  | 4 | 2  | 4              | 0  |
| East South Central..... | 0  | 13 | 6 | 13 | 19             | 6  | 6 | 13 | 0              | 0  |
| West South Central..... | 14 | 7  | 7 | 11 | 10             | 14 | 7 | 7  | 3              | 11 |
| Mountain.....           | 9  | 0  | 0 | 0  | <sup>1</sup> 9 | 0  | 0 | 0  | 0              | 9  |
| Pacific.....            | 5  | 0  | 2 | 2  | 5              | 7  | 0 | 2  | 0              | 5  |

## PNEUMONIA DEATH RATES

| 91 cities.....          | 70  | 72  | 67  | 66 | <sup>1</sup> 64 | 54  | 50 | 53  | <sup>1</sup> 47 | 43 |
|-------------------------|-----|-----|-----|----|-----------------|-----|----|-----|-----------------|----|
| New England.....        | 65  | 75  | 60  | 53 | 36              | 36  | 79 | 44  | 50              | 89 |
| Middle Atlantic.....    | 72  | 78  | 76  | 71 | 67              | 55  | 50 | 54  | <sup>4</sup> 63 | 54 |
| East North Central..... | 60  | 52  | 51  | 56 | <sup>1</sup> 61 | 40  | 47 | 37  | <sup>1</sup> 29 | 32 |
| West North Central..... | 106 | 111 | 38  | 57 | 77              | 63  | 88 | 75  | 71              | 39 |
| South Atlantic.....     | 59  | 70  | 103 | 72 | <sup>7</sup> 67 | 60  | 71 | 60  | 39              | 54 |
| East South Central..... | 82  | 117 | 139 | 91 | 82              | 142 | 50 | 71  | 44              | 52 |
| West South Central..... | 76  | 64  | 90  | 85 | 90              | 78  | 86 | 78  | 45              | 46 |
| Mountain.....           | 78  | 132 | 35  | 79 | <sup>1</sup> 72 | 62  | 61 | 106 | 35              | 53 |
| Pacific.....            | 34  | 60  | 41  | 45 | 46              | 52  | 31 | 50  | 24              | 18 |

<sup>1</sup> Milwaukee, Wis., Columbia, S. C., and Billings, Mont., not included.

<sup>2</sup> Newark, N. J., and Racine, Wis., not included.

<sup>3</sup> Newark, N. J., not included.

<sup>4</sup> Milwaukee, Wis., not included.

<sup>5</sup> Racine, Wis., not included.

<sup>6</sup> Columbia, S. C., not included.

<sup>7</sup> Billings, Mont., not included.



## FOREIGN AND INSULAR

### ARGENTINA

*San Juan Province—Plague.*—Unofficial advices report an epidemic of plague in the Province of San Juan, Argentina.

### CANADA

*Provinces—Communicable diseases—Week ended July 11, 1931.*—The Department of Pensions and National Health of Canada reports cases of certain communicable diseases for the week ended July 11, 1931, as follows:

| Province                          | Cerebro-spinal fever | Dysentery | Polio-myelitis | Small-pox | Typhoid fever |
|-----------------------------------|----------------------|-----------|----------------|-----------|---------------|
| Prince Edward Island <sup>1</sup> |                      |           |                |           |               |
| Nova Scotia <sup>1</sup>          |                      |           |                |           |               |
| New Brunswick <sup>1</sup>        |                      |           |                |           |               |
| Quebec                            |                      |           |                |           | 12            |
| Ontario                           | 1                    |           | 2              | 6         | 12            |
| Manitoba <sup>1</sup>             |                      |           |                |           |               |
| Saskatchewan                      |                      |           |                | 13        | 2             |
| Alberta                           | 1                    |           |                |           | 2             |
| British Columbia                  | 1                    | 1         | 1              |           |               |
| Total                             | 3                    | 1         | 3              | 19        | 28            |

<sup>1</sup> No case of any disease included in the table was reported during the week.

*Quebec Province—Communicable diseases—Week ended July 18, 1931.*—The Bureau of Health of the Province of Quebec, Canada, reports cases of certain communicable diseases for the week ended July 18, 1931, as follows:

| Disease        | Cases | Disease                    | Cases |
|----------------|-------|----------------------------|-------|
| Chicken pox    | 27    | Scarlet fever              | 21    |
| Diphtheria     | 19    | Smallpox                   | 1     |
| Erysipelas     | 1     | Tuberculosis (pulmonary)   | 36    |
| German measles | 1     | Tuberculosis (other forms) | 3     |
| Measles        | 56    | Typhoid fever              | 15    |
| Mumps          | 3     | Whooping cough             | 6     |
| Polio-myelitis | 1     |                            |       |

### CHINA

*Chiobe and Changchow—Plague.*—An outbreak of plague in Chiobe and Changchow, 25 and 65 miles, respectively, from Amoy, China, was reported July 23, 1931. It was said that 1,500 deaths had occurred during the preceding six weeks.

(1894)

## CZECHOSLOVAKIA

*Communicable diseases—May, 1931.*—During the month of May, 1931, certain communicable diseases were reported in the Republic of Czechoslovakia as follows:

| Disease                       | Cases | Deaths | Disease                | Cases | Deaths |
|-------------------------------|-------|--------|------------------------|-------|--------|
| Anthrax.....                  | 10    | 1      | Paratyphoid fever..... | 14    | 1      |
| Cerebrospinal meningitis..... | 18    | 8      | Puerperal fever.....   | 42    | 10     |
| Diphtheria.....               | 1,029 | 60     | Scarlet fever.....     | 1,016 | 27     |
| Dysentery.....                | 9     |        | Trachoma.....          | 209   |        |
| Malaria.....                  | 70    |        | Typhoid fever.....     | 234   | 23     |

## SOUTH AMERICA

*Yellow fever.*—Quarantine officers of the Public Health Service are alert to the possible presence of yellow fever in parts of South America on the Caribbean coast, particularly the western part, and on the east coast south of the Amazon River to Rio de Janeiro. The port of Para (Belem) at the mouth of the Amazon River is regarded as infected and scattered cases have been reported at various interior points more or less close to several of the seaports along the coast. (See p. 1908.) It is understood that the Brazilian authorities are maintaining an effective antimosquito campaign in the principal seaports and that danger of maritime spread is decreased accordingly. Information has been received from reliable unofficial sources indicating the occurrence of cases of yellow fever in the interior of Colombia in the region of Santa Marta and Barranquilla, but as yet these reports lack official confirmation.

## CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER

From medical officers of the Public Health Service, American consuls, International Office of Public Hygiene, Pan American Sanitary Bureau, health section of the League of Nations, and other sources. The reports contained in the following tables must not be considered as complete or final as regards either the list of countries included or the figures for the particular countries for which reports are given.

## CHOLERA

[C indicates cases; D, deaths; P, present]

| Place                              | Week ended—                 |                            |                            |                           |           |    |    |    |   |            |    |    |   |    |            |  |  |  |
|------------------------------------|-----------------------------|----------------------------|----------------------------|---------------------------|-----------|----|----|----|---|------------|----|----|---|----|------------|--|--|--|
|                                    | Jan. 11–<br>Feb. 7,<br>1931 | Feb. 8–<br>Mar. 7,<br>1931 | Mar. 8–<br>Apr. 4,<br>1931 | Apr. 5–<br>May 2,<br>1931 | May, 1931 |    |    |    |   | June, 1931 |    |    |   |    | July, 1931 |  |  |  |
|                                    |                             |                            |                            |                           | 9         | 16 | 23 | 30 | 6 | 13         | 20 | 27 | 4 | 11 | 18         |  |  |  |
| Ceylon: Colombo.....               |                             |                            |                            |                           |           |    |    |    |   |            |    |    |   |    |            |  |  |  |
| China:                             |                             |                            |                            |                           |           |    |    |    |   |            |    |    |   |    |            |  |  |  |
| Canton.....                        |                             |                            |                            | 1                         |           |    |    | 2  |   |            |    |    | 1 |    |            |  |  |  |
| Swatow.....                        |                             |                            |                            |                           |           |    |    | 1  |   |            |    |    |   |    |            |  |  |  |
| Tientsin.....                      |                             |                            |                            |                           |           |    |    |    |   |            |    |    | 3 | 1  | 6          |  |  |  |
| India.....                         |                             |                            |                            |                           |           |    |    |    |   |            |    |    |   |    |            |  |  |  |
| Bombay.....                        |                             |                            |                            | 2                         |           |    |    |    |   |            |    |    |   |    |            |  |  |  |
| Calcutta.....                      |                             |                            |                            | 1                         |           |    |    |    |   |            |    |    |   |    |            |  |  |  |
| Karikal.....                       |                             |                            |                            |                           |           |    |    |    |   |            |    |    |   |    |            |  |  |  |
| Madras.....                        |                             |                            |                            |                           |           |    |    |    |   |            |    |    |   |    |            |  |  |  |
| Negapatam.....                     |                             |                            |                            |                           |           |    |    |    |   |            |    |    |   |    |            |  |  |  |
| Rangoon.....                       |                             |                            |                            |                           |           |    |    |    |   |            |    |    |   |    |            |  |  |  |
| Tuticorin.....                     |                             |                            |                            |                           |           |    |    |    |   |            |    |    |   |    |            |  |  |  |
| Vijayapatam.....                   |                             |                            |                            |                           |           |    |    |    |   |            |    |    |   |    |            |  |  |  |
| India (French):                    |                             |                            |                            |                           |           |    |    |    |   |            |    |    |   |    |            |  |  |  |
| Chanderanagar.....                 |                             |                            |                            |                           |           |    |    |    |   |            |    |    |   |    |            |  |  |  |
| Pondicherry.....                   |                             |                            |                            |                           |           |    |    |    |   |            |    |    |   |    |            |  |  |  |
| Indo-China (see also table below): |                             |                            |                            |                           |           |    |    |    |   |            |    |    |   |    |            |  |  |  |
| Phnompenh.....                     |                             |                            |                            |                           |           |    |    |    |   |            |    |    |   |    |            |  |  |  |
| Saigon and Cholon.....             |                             |                            |                            |                           |           |    |    |    |   |            |    |    |   |    |            |  |  |  |

| Place  | De-<br>cem-<br>ber,<br>1900 | Janu-<br>ary,<br>1901 | Febru-<br>ary,<br>1901 | March, 1901 |       |       | April, 1901 |       |       | May, 1901 |       |       | June, 1901 |       |       |
|--|-----------------------------|-----------------------|------------------------|-------------|-------|-------|-------------|-------|-------|-----------|-------|-------|------------|-------|-------|
|  |                             |                       |                        | March, 1901 |       |       | April, 1901 |       |       | May, 1901 |       |       | June, 1901 |       |       |
|  |                             |                       |                        | 1-10        | 11-20 | 21-31 | 1-10        | 11-20 | 21-30 | 1-10      | 11-20 | 21-31 | 1-10       | 11-20 | 11-30 |
| Persia: Rafsanjan <sup>1</sup> .....                     | 2                           |                       |                        |             |       |       | 31          | 12    | 4     |           |       |       |            |       |       |
| Philippine Islands: <sup>2</sup>                         |                             |                       |                        |             |       |       |             |       |       |           |       |       |            |       |       |
| Iloilo.....  | 2                           |                       |                        |             |       |       |             |       |       |           |       |       |            |       |       |
| Provinces—   |                             |                       |                        |             |       |       |             |       |       |           |       |       |            |       |       |
| Capiz.....   | 59                          | 186                   | 48                     | 20          | 11    | 3     |             |       | 3     | 4         |       |       |            |       |       |
| Iloilo.....  | 47                          | 146                   | 41                     | 24          | 11    | 3     |             |       | 1     | 4         |       |       |            |       |       |
| Masbata.....   | 145                         | 95                    | 7                      |             |       |       |             |       | 8     | 7         | 5     | 0     | 24         | 3     |       |
| Negros, Occidental.....                                  | 110                         | 65                    | 4                      |             |       |       |             |       | 6     | 5         | 6     | 4     | 22         | 3     |       |
| Negros, Oriental.....                                    |                             |                       | 21                     |             |       |       |             |       |       |           |       |       |            |       |       |
| Pampanga.....  | 90                          | 4                     | 9                      |             |       |       |             |       |       |           |       | 2     |            |       |       |
| Siam.....  | 56                          | 4                     |                        |             |       |       |             |       |       |           |       | 1     |            |       |       |
| Ayudhya District.....                                    | 1                           |                       |                        |             |       |       |             |       |       |           |       |       |            |       |       |
| Bangkok.....   | 3                           | 1                     | 10                     | 10          | 11    | 2     |             |       | 1     | 1         | 3     |       |            | 1     |       |
| Bismulok Province.....                                   | 1                           |                       | 2                      | 4           | 3     | 1     |             |       | 1     | 1         | 1     |       |            | 1     |       |
| On vessel:   |                             |                       |                        |             |       |       |             |       |       |           |       |       |            |       |       |
| S. S. Arankola, at Rangoon from Calcutta.....            | 3                           | 2                     | 3                      | 3           | 1     | 1     |             |       | 1     |           |       |       |            |       |       |
| S. S. City of Eastborne, at Calcutta from Cocosnada..... | 1                           | 1                     | 2                      | 2           | 2     | 1     |             |       | 1     |           |       |       |            |       |       |
| S. S. Talrea, at Penang from Calcutta.....               |                             |                       | 8                      |             |       |       |             |       |       |           |       |       |            |       |       |
| Indo-China (French) (see also table above):              |                             |                       |                        |             |       |       |             |       |       |           |       |       |            |       |       |
| Cambodia.....  | 28                          | 62                    | 125                    | 14          |       |       |             |       |       |           |       |       |            |       |       |
| Cochin China <sup>3</sup> .....                          | 8                           | 24                    | 29                     | 39          | 33    | 33    |             |       |       |           |       |       |            |       |       |
|  |                             |                       |                        |             |       |       |             |       |       |           |       | 44    | 40         | 83    | 96    |
|  |                             |                       |                        |             |       |       |             |       |       |           | 1     | 62    | 75         | 71    | 69    |

<sup>1</sup> From May 3 to 25, 1901, 192 cases of cholera with 76 deaths were reported in Rafsanjan and vicinity, Karman district, Persia.

<sup>2</sup> Figures for cholera in the Philippine Islands are subject to correction.

<sup>3</sup> Reports incomplete.





|  |       |       |       |       |       |       |       |       |       |       |       |       |       |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Asiout.....                                      | 26    | 41    | 13    | 32    | 4     | 5     | 8     | 1     | 4     | 5     | 2     | 1     | ..... |
| Bent-Suef.....                                   | 0     | 11    | 6     | 17    | 2     | 4     | 1     | 1     | ..... | ..... | ..... | ..... | ..... |
| Cairo.....                                       | 1     | ..... | ..... | 12    | 3     | ..... | 2     | ..... | ..... | ..... | ..... | ..... | ..... |
| Deirout.....                                     | 1     | ..... | ..... | 8     | 1     | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Gharbleh.....                                    | 21    | 16    | 1     | 3     | 7     | 1     | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Girga.....                                       | 4     | 4     | ..... | 1     | 2     | 2     | 2     | 2     | 1     | ..... | ..... | ..... | ..... |
| Kena.....  | 1     | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Manfalut.....                                    | 1     | ..... | ..... | 44    | 1     | 1     | 5     | ..... | ..... | ..... | ..... | ..... | ..... |
| Minieh.....                                      | 1     | ..... | ..... | 21    | 1     | 1     | 1     | ..... | ..... | ..... | ..... | ..... | ..... |
| Port Said.....                                   | 1     | ..... | ..... | 22    | 1     | ..... | 1     | ..... | ..... | ..... | ..... | ..... | ..... |
| Manfalut.....                                    | 30    | 15    | 17    | 1     | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Minieh.....                                      | 0     | 8     | 3     | 1     | 5     | 2     | 1     | ..... | ..... | ..... | ..... | ..... | ..... |
| Port Said.....                                   | 1     | ..... | 2     | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Hawaii Territory: Hamakua—Plague-infected rats   | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| India.....                                       | 5,335 | 5,457 | 9,139 | 6,142 | 434   | 139   | 130   | 48    | ..... | ..... | ..... | ..... | ..... |
| Basseln.....                                     | 3,422 | 3,661 | 7,037 | 5,199 | 385   | 143   | 131   | 33    | ..... | ..... | ..... | ..... | ..... |
| Bombay.....                                      | 1     | 1     | 4     | 11    | 5     | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Plague-infected rats                             | 34    | 32    | 70    | 137   | 26    | 30    | 17    | 21    | 10    | 10    | 7     | 11    | 16    |
| Calcutta.....                                    | ..... | ..... | ..... | 2     | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Madras Presidency.....                           | 312   | 74    | 23    | 3     | 1     | 1     | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Rangoon.....                                     | 182   | 46    | 21    | 2     | 1     | 1     | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Plague-infected rats                             | 2     | ..... | 1     | 1     | 1     | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Indo-China (see also table below): Pnompenh..... | 4     | 8     | 7     | 4     | 1     | 1     | 3     | 2     | 1     | ..... | ..... | ..... | ..... |
| Iraq.....  | 7     | 1     | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Baghdad.....                                     | 7     | 4     | 6     | 4     | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Mandhan.....                                     | 5     | 3     | 8     | 23    | 7     | 10    | 4     | 2     | 10    | 6     | 1     | 6     | 1     |
| Madagascar (see also table below): Tamatave..... | 4     | 2     | 5     | 8     | 3     | 4     | 2     | 2     | 1     | 4     | 1     | 3     | 1     |
| Morocco.....                                     | 9     | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Nigeria: Lagoa.....                              | 13    | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Plague-infected rats                             | 4     | 4     | ..... | 5     | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Pern (see table below).....                      | 1     | ..... | ..... | 6     | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Senegal (see table below).....                   | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |

1 On July 23, 1931, an indirect report was received stating that an epidemic of plague had occurred in Chiobe and Chungchow, China, not far from Anoy.

## CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

## PLAGUE—Continued

[C indicates cases; D, deaths; P, present]

| Place                                       | Week ended—                |                            |                           |                           |                            |                            |                             |                             |                            |                            |                            |                            |                            |                            |                           |                           |                            |                            |
|---|----------------------------|----------------------------|---------------------------|---------------------------|----------------------------|----------------------------|-----------------------------|-----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|---------------------------|---------------------------|----------------------------|----------------------------|
|   | May, 1931                  |                            |                           |                           |                            |                            |                             |                             |                            |                            | June, 1931                 |                            |                            |                            | July, 1931                |                           |                            |                            |
|   | 0                          | 16                         | 23                        | 30                        | 6                          | 13                         | 20                          | 27                          | 4                          | 11                         | 18                         | 25                         |                            |                            |                           |                           |                            |                            |
| Jan. 11–<br>Feb. 7,<br>1931                 | Feb. 8–<br>Mar. 4,<br>1931 | Mar. 5–<br>Apr. 1,<br>1931 | Apr. 2–<br>May 2,<br>1931 | May 3–<br>June 1,<br>1931 | June 2–<br>July 1,<br>1931 | July 2–<br>Aug. 1,<br>1931 | Aug. 2–<br>Sept. 1,<br>1931 | Sept. 2–<br>Oct. 1,<br>1931 | Oct. 2–<br>Nov. 1,<br>1931 | Nov. 2–<br>Dec. 1,<br>1931 | Dec. 2–<br>Jan. 1,<br>1932 | Jan. 2–<br>Feb. 1,<br>1932 | Feb. 2–<br>Mar. 1,<br>1932 | Mar. 2–<br>Apr. 1,<br>1932 | Apr. 2–<br>May 1,<br>1932 | May 2–<br>June 1,<br>1932 | June 2–<br>July 1,<br>1932 | July 2–<br>Aug. 1,<br>1932 |
| Siam.....                                   | 4                          | 18                         | 31                        | 1                         | 1                          | 1                          | 1                           | 1                           | 1                          | 1                          | 1                          | 1                          | 1                          | 1                          | 1                         | 1                         | 1                          | 1                          |
| Bangkok.....                                | 2                          | 14                         | 7                         | 1                         | 1                          | 1                          | 1                           | 1                           | 1                          | 1                          | 1                          | 1                          | 1                          | 1                          | 1                         | 1                         | 1                          | 1                          |
| Nagara Rajsim.....                          | 8                          | 6                          | 29                        | 6                         | 6                          | 6                          | 6                           | 6                           | 6                          | 6                          | 6                          | 6                          | 6                          | 6                          | 6                         | 6                         | 6                          | 6                          |
| Syria: Beirut.....                          | 9                          | 7                          | 1                         | 1                         | 1                          | 1                          | 1                           | 1                           | 1                          | 1                          | 1                          | 1                          | 1                          | 1                          | 1                         | 1                         | 1                          | 1                          |
| Tripolitania.....                           | 10                         | 6                          | 6                         | 1                         | 1                          | 1                          | 1                           | 1                           | 1                          | 1                          | 1                          | 1                          | 1                          | 1                          | 1                         | 1                         | 1                          | 1                          |
| Tunisia: Tunis.....                         | 3                          | 8                          | 1                         | 1                         | 1                          | 1                          | 1                           | 1                           | 1                          | 1                          | 1                          | 1                          | 1                          | 1                          | 1                         | 1                         | 1                          | 1                          |
| Union of Socialist Soviet Republics:        | 1                          | 14                         | 10                        | 16                        | 8                          | 1                          | 1                           | 1                           | 1                          | 1                          | 1                          | 1                          | 1                          | 1                          | 1                         | 1                         | 1                          | 1                          |
| Gouranduz.....                              | 28                         | 7                          | 4                         | 8                         | 1                          | 1                          | 1                           | 1                           | 1                          | 1                          | 1                          | 1                          | 1                          | 1                          | 1                         | 1                         | 1                          | 1                          |
| Transcaucasia—Karabakh.....                 | 6                          | 1                          | 1                         | 1                         | 1                          | 1                          | 1                           | 1                           | 1                          | 1                          | 1                          | 1                          | 1                          | 1                          | 1                         | 1                         | 1                          | 1                          |
| Union of South Africa:                      | P                          | 1                          | 1                         | 3                         | 2                          | 1                          | 1                           | 1                           | 1                          | 1                          | 1                          | 1                          | 1                          | 1                          | 1                         | 1                         | 1                          | 1                          |
| Cape Province.....                          | 1                          | 1                          | 1                         | 2                         | 1                          | 1                          | 1                           | 1                           | 1                          | 1                          | 1                          | 1                          | 1                          | 1                          | 1                         | 1                         | 1                          | 1                          |
| Orange Free State.....                      | 1                          | 1                          | 1                         | 2                         | 1                          | 1                          | 1                           | 1                           | 1                          | 1                          | 1                          | 1                          | 1                          | 1                          | 1                         | 1                         | 1                          | 1                          |
| British East Africa (see also table above): | 345                        | 245                        | 154                       | 2                         | 2                          | 2                          | 2                           | 2                           | 2                          | 2                          | 2                          | 2                          | 2                          | 2                          | 2                         | 2                         | 2                          | 2                          |
| Kenya.....                                  | 7                          | 4                          | 2                         | 2                         | 2                          | 2                          | 2                           | 2                           | 2                          | 2                          | 2                          | 2                          | 2                          | 2                          | 2                         | 2                         | 2                          | 2                          |
| Indo-China (see also table above):          | 30                         | 30                         | 30                        | 30                        | 30                         | 30                         | 30                          | 30                          | 30                         | 30                         | 30                         | 30                         | 30                         | 30                         | 30                        | 30                        | 30                         | 30                         |
| Madagascar (see also table above):          | 66                         | 84                         | 83                        | 48                        | 48                         | 48                         | 48                          | 48                          | 48                         | 48                         | 48                         | 48                         | 48                         | 48                         | 48                        | 48                        | 48                         | 48                         |
| Ambositra Province.....                     | 57                         | 70                         | 74                        | 47                        | 47                         | 47                         | 47                          | 47                          | 47                         | 47                         | 47                         | 47                         | 47                         | 47                         | 47                        | 47                        | 47                         | 47                         |
| Antsirabe Province.....                     | 28                         | 31                         | 19                        | 6                         | 6                          | 6                          | 6                           | 6                           | 6                          | 6                          | 6                          | 6                          | 6                          | 6                          | 6                         | 6                         | 6                          | 6                          |
| Miarinarivo Province.....                   | 26                         | 29                         | 19                        | 6                         | 6                          | 6                          | 6                           | 6                           | 6                          | 6                          | 6                          | 6                          | 6                          | 6                          | 6                         | 6                         | 6                          | 6                          |
| Moramanga Province.....                     | 7                          | 7                          | 1                         | 1                         | 1                          | 1                          | 1                           | 1                           | 1                          | 1                          | 1                          | 1                          | 1                          | 1                          | 1                         | 1                         | 1                          | 1                          |
| Tananarive Province.....                    | 6                          | 145                        | 90                        | 41                        | 41                         | 41                         | 41                          | 41                          | 41                         | 41                         | 41                         | 41                         | 41                         | 41                         | 41                        | 41                        | 41                         | 41                         |
| Tananarive Province.....                    | 59                         | 139                        | 81                        | 40                        | 40                         | 40                         | 40                          | 40                          | 40                         | 40                         | 40                         | 40                         | 40                         | 40                         | 40                        | 40                        | 40                         | 40                         |

1 Reports incomplete.

## SMALLPOX

[C indicates cases; D, deaths; P, present]

| Place  | Week ended— |    |    |           |    |    |    |    |    |    |            |    |   |    |
|--|-------------|----|----|-----------|----|----|----|----|----|----|------------|----|---|----|
|  | April, 1931 |    |    | May, 1931 |    |    |    |    |    |    | June, 1931 |    |   |    |
|  | 11          | 18 | 25 | 2         | 9  | 16 | 23 | 30 | 6  | 13 | 20         | 27 | 4 | 11 |
| Algerie:                                     |             |    |    |           |    |    |    |    |    |    |            |    |   |    |
| Algiers.....                                 | 1           |    | 2  |           |    |    |    |    |    |    |            |    |   |    |
| Bone.....                                    | 1           |    |    |           |    |    |    |    |    |    |            |    |   |    |
| Constantine.....                             |             |    |    |           |    |    |    |    |    |    |            |    |   |    |
| Arubia: Aden.....                            |             |    |    |           | 1  |    |    |    |    |    |            |    |   |    |
| Belgian Congo.....                           | 50          |    |    |           |    |    | 7  | 10 | 30 |    |            |    |   |    |
| Belgium.....                                 |             |    |    |           |    |    |    |    |    |    |            |    |   |    |
| Bolivia.....                                 |             |    |    |           |    |    |    |    |    |    |            |    |   |    |
| Brazil: Porto Alegre (alastim).....          | 3           |    |    | 8         | 6  | 2  | 4  | 7  | 6  | 2  | 3          |    |   |    |
| British East Africa: Tanganyika.....         | 70          |    |    |           |    |    |    |    |    |    |            |    |   |    |
| British East Africa: Tanganyika.....         | 6           |    |    |           |    |    |    |    |    |    |            |    |   |    |
| British South Africa: Southern Rhodesia..... | 13          |    |    |           |    |    |    |    |    |    |            |    |   |    |
| Canada:                                      |             |    |    |           |    |    |    |    |    |    |            |    |   |    |
| Alberta.....                                 | 7           |    |    |           |    |    |    |    |    |    |            |    |   |    |
| British Columbia.....                        | 2           |    |    |           |    |    |    |    |    |    |            |    |   |    |
| Manitoba.....                                | 1           |    |    |           |    |    |    |    |    |    |            |    |   |    |
| Winnipeg.....                                |             |    |    |           | 4  |    |    |    |    |    |            |    |   |    |
| Nova Scotia.....                             |             |    |    |           |    |    |    |    |    |    |            |    |   |    |
| Ontario:                                     |             |    |    |           |    |    |    |    |    |    |            |    |   |    |
| Kingston.....                                | 49          |    |    | 6         | 7  | 17 | 5  | 3  | 4  | 3  | 14         | 3  | 6 |    |
| North Bay.....                               | 1           |    |    | 2         | 3  |    |    |    |    |    |            |    |   |    |
| Ottawa.....                                  | 1           |    |    |           |    |    |    |    |    |    |            |    |   |    |
| Sault Ste. Marie.....                        | 3           |    |    |           |    |    |    |    |    |    |            |    |   |    |
| Toronto.....                                 | 30          |    |    | 1         |    |    |    |    |    |    |            |    |   |    |
| Quebec.....                                  | 2           |    |    | 2         | 1  |    |    |    |    |    |            |    |   |    |
| Saskatchewan.....                            | 2           |    |    | 4         |    |    |    |    |    |    |            |    |   |    |
| Regina.....                                  | 28          |    |    | 3         | 22 | 7  | 15 | 18 | 8  | 7  | 16         | 13 | 1 | 13 |
| Canary Islands: Las Palmas.....              | 1           |    |    | 2         | 2  |    |    |    |    |    |            |    |   |    |
| Chile:                                       |             |    |    |           |    |    |    |    |    |    |            |    |   |    |
| Antofagasta.....                             |             |    |    |           |    |    |    |    |    |    |            |    |   |    |
| Chancay.....                                 |             |    |    |           |    |    |    |    |    |    |            |    |   |    |
| China:                                       |             |    |    |           |    |    |    |    |    |    |            |    |   |    |
| Amoy.....                                    | 3           |    |    | 1         | 2  | 1  |    |    |    |    |            |    |   |    |
| Canton.....                                  |             |    |    |           |    |    |    |    |    |    |            |    |   |    |

An epidemic of smallpox was reported on May 13 with 716 cases and 314 deaths since the middle of April, 1931, in Mandes Province, Bolivia.







**CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

## SMALLPOX—Continued

[C indicates cases; D, deaths; P, present]

[illegible]





Latvia (see table below).  
Lithuania (see table below).  
Mexico (see also table below).

Mexico City, including municipalities in Federal District.

San Luis Potosí.

Morocco.

Palestine.

Panama Canal Zone—Balboa.

Paraguay: Asuncion.

Poland.

Portugal: Oporto.

Rumania.

Syria.

Tunisia:

Sbeitia, vicinity of.

Sfax.

Tunis.

Turkey (see table below).

Union of South Africa:

Cape Province.

Municipality of East London.

Natal.

Orange Free State.

Transvaal.

Yugoslavia (see table below).

| Place   | Dec., 1930 | Jan., 1931 | Feb., 1931 | Mar., 1931 | Apr., 1931 | May, 1931 |
|---|------------|------------|------------|------------|------------|-----------|
| Latvia (see table below).                                 |            |            |            |            |            |           |
| Lithuania (see table below).                              |            |            |            |            |            |           |
| Mexico (see also table below).                            |            |            |            |            |            |           |
| Durango   | D          | 1          | 39         | 35         | 216        | 67        |
| Mexico City, including municipalities in Federal District | C          | 34         | 16         | 84         | 18         | 7         |
| San Luis Potosi   | D          | 8          | 28         | 5          | 1          | 2         |
| Moreno  | D          | 2          | 2          | 7          |            | 1         |
| Palatine  | D          | 2          | 3          | 5          | 1          | 2         |
| Panama Canal Zone—Balboa                                  | C          | 4          | 1          |            |            |           |
| Paraguay: Asuncion  | D          | 106        | 189        | 287        | 93         | 176       |
| Poland  | D          | 8          | 19         | 15         | 8          | 7         |
| Portugal: Oporto  | D          | 193        | 152        | 214        | 70         | 52        |
| Rumania   | C          | 16         | 24         | 16         | 8          | 10        |
| Syria   | D          |            |            |            |            |           |
| Tunisia   | C          |            |            |            |            |           |
| Shetlia, vicinity of                                      | C          |            |            |            |            |           |
| Sax   | C          |            |            |            |            |           |
| Tunis   | C          | 16         | 18         | 2          | 2          | 1         |
| Turkey (see table below).                                 | D          |            |            |            |            |           |
| Union of South Africa:                                    |            |            |            |            |            |           |
| Cape Province   |            |            |            |            |            |           |
| Municipality of East London                               | C          | P          | P          | P          | P          | P         |
| Natal   | C          | 3          | P          | P          | P          | P         |
| Orange Free State   | C          | P          | P          | P          | P          | P         |
| Transvaal   | C          | P          | P          | P          | P          | P         |
| Yugoslavia (see table below).                             | C          |            |            |            |            |           |
| Chosen: Seoul   | C          | 1          | 3          | 4          |            |           |
| Czechoslovakia  | C          | 24         | 60         | 5          |            |           |
| Greece  | C          | 10         | 17         | 22         | 6          |           |
| Latvia  | D          | 2          | 2          | 3          |            |           |
|   | C          |            | 12         |            |            |           |
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## CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

## YELLOW FEVER

[C indicates cases; D, deaths; P, present]

| Place                          | Week ended— |    |    |            |   |    |            |    |   |    |    |  |
|--------------------------------|-------------|----|----|------------|---|----|------------|----|---|----|----|--|
|                                | May, 1931   |    |    | June, 1931 |   |    | July, 1931 |    |   |    |    |  |
|                                | 9           | 16 | 23 | 30         | 6 | 13 | 20         | 27 | 4 | 11 | 18 |  |
| Brazil:                        |             |    |    |            |   |    |            |    |   |    |    |  |
| Bahia State <sup>1</sup> ..... |             |    |    |            |   |    |            |    |   |    |    |  |
| Ceara State.....               |             |    |    |            |   |    |            |    |   |    |    |  |
| Minas Geraes State.....        |             |    |    |            |   |    |            |    |   |    |    |  |
| Rio de Janeiro State.....      |             |    |    |            |   |    |            |    |   |    |    |  |
| Cambucy.....                   |             |    |    |            |   |    |            |    |   |    |    |  |
| Friburgo (imported).....       |             |    |    |            |   |    |            |    |   |    |    |  |
| Padua.....                     |             |    |    |            |   |    |            |    |   |    |    |  |
| Sergipe State.....             |             |    |    |            |   |    |            |    |   |    |    |  |
| British Cameroons: Mamfe.....  |             |    |    |            |   |    |            |    |   |    |    |  |
| Colombia: <sup>2</sup>         |             |    |    |            |   |    |            |    |   |    |    |  |
| Gold Coast:                    |             |    |    |            |   |    |            |    |   |    |    |  |
| Akuse.....                     |             |    |    |            |   |    |            |    |   |    |    |  |
| Kintampo.....                  |             |    |    |            |   |    |            |    |   |    |    |  |
| Tamale.....                    |             |    |    |            |   |    |            |    |   |    |    |  |
| Ivory Coast:                   |             |    |    |            |   |    |            |    |   |    |    |  |
| Hobo Dionluso.....             |             |    |    |            |   |    |            |    |   |    |    |  |
| Kong Circle.....               |             |    |    |            |   |    |            |    |   |    |    |  |
| Sudan (French).....            |             |    |    |            |   |    |            |    |   |    |    |  |

<sup>1</sup>The report of 2 cases of yellow fever in the State of Bahia, Brazil, during March, 1931, was erroneous. Only 1 case occurred, and the infection originated in a laboratory.

<sup>2</sup>4 suspected cases of yellow fever were reported near Cienaga, Magdalena Province, Colombia, July 30, 1931.